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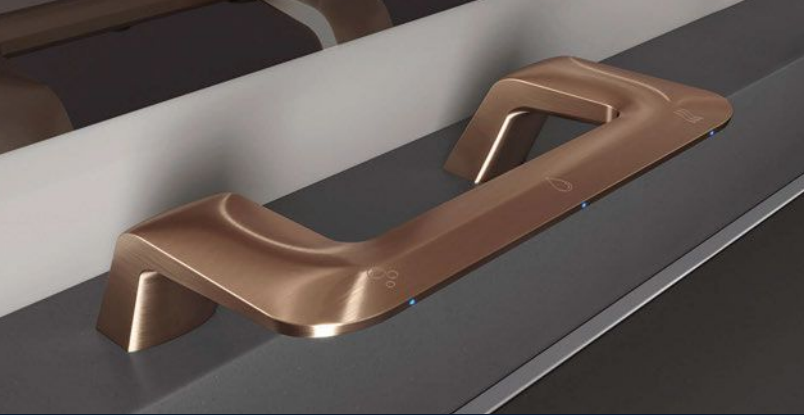


All Stars

Third-annual
Metamorphosis
Awards Winners

ADDITION-CATEGORY
WINNER story on
page 64

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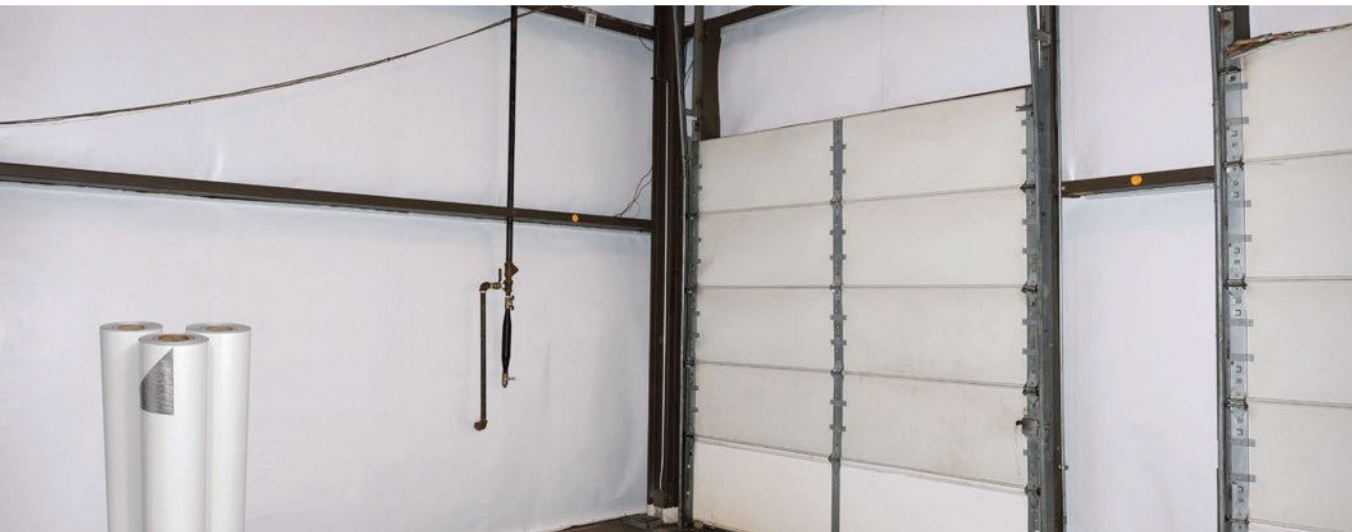
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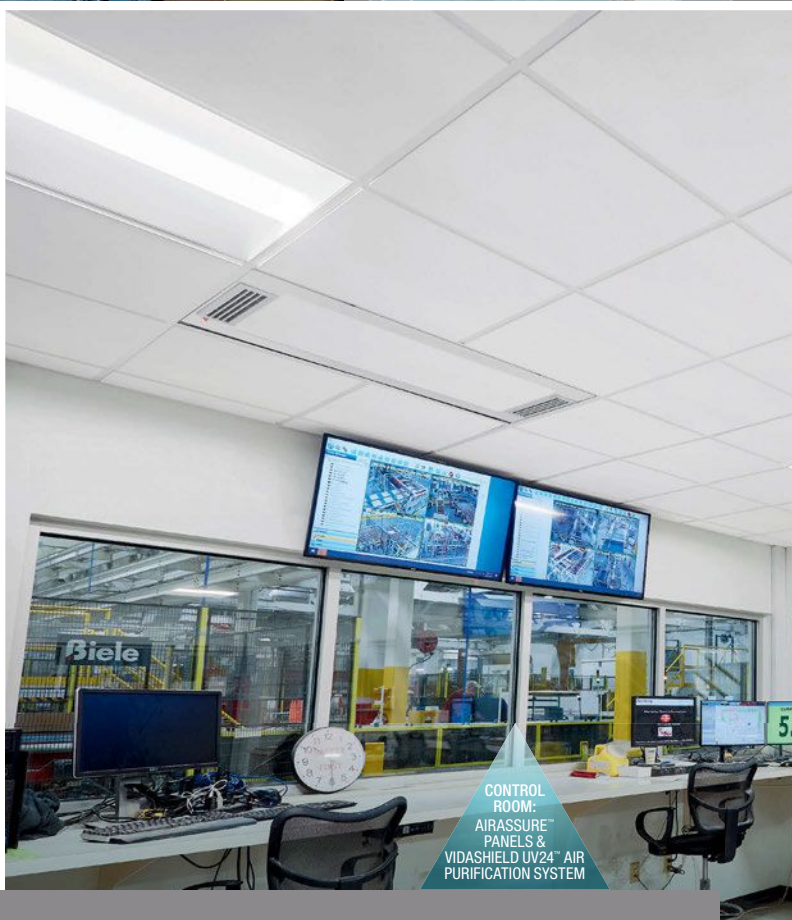
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2021 METAMORPHOSIS AWARDS

retrofit's third-annual Metamorphosis Awards culminated in 16 winners with outstanding achievements in retrofitting commercial, industrial and institutional buildings.

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RETROFIT MAGAZINE
METAMORPHOSIS AWARDS



← cover

COVER PHOTO: CHRISTOPHER PAYNE

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REINVENTION

One of my college friends just embarked on a new career at—I hate to say it—the mid-point of his life. My friend Dan spent his entire career in sales and marketing for non-profits and private industry, most recently leading outreach services for a community college in eastern Iowa. Meanwhile, he has always been very talented at home improvement, completing upgrades and remodels in and around his own home and for friends and neighbors.

Dan's "hobby", which includes a passion for building science, grew into an after-work and weekend gig that was keeping him extremely busy, simply through word-of-mouth referrals and a few Facebook posts. Last year, a couple 100-year events put Dan's skills in high-demand. First, COVID-19 lockdowns convinced many homeowners their homes needed upgrades. Second, a derecho (a long-lasting and widespread line of storms) hit eight Midwest states in August and, Dan's locale of Cedar Rapids was especially hit hard. Straight-line winds damaged every part of the 75-square-mile city, and Dan found himself doing a lot of siding and window repairs and replacements.

By August of this year, Dan realized he already had made more money in 2021 with his side-gig than he had during the craziness of 2020, so he and his wife Amanda decided it was time for him to embark on a fulltime home-improvement career. (I've already called Dan to get on his schedule for some additional upgrades around our house; our kitchen remodel has snowballed! Learn more by reading "My Home Remodel" blog series at www.retrofitmagazine.com/category/blog.) Despite having a background in sales and marketing to help his new business, Dan is taking a leap of faith by changing careers. It takes vision and fortitude, both of which I know Dan has in plenty.

Dan is not unlike the visionaries who are winners of our third-annual Metamorphosis Awards. Each of the winning firms showcased in this issue saw possibilities where many would not. For example, the 1st Place Adaptive Reuse category winner, GBBN, transformed a decrepit 1887 building in Pittsburgh that serviced train engines and redirected cargo for the Monongahela Connecting Railroad. GBBN's Principal Anne Chen didn't see a disaster when she set to work on adapting the structure to become a Silicon Valley, Calif.-based business' innovation center. Instead, she was thrilled. "You can envision the trains, and there's a beauty in the functionality of moving the trains that informed the building's curved geometry. It's actually awe-inspiring," she says in the story on page 18.

Another creative vision transformed a 120-foot-long, oddly proportioned corridor that felt like an afterthought though it was the primary entrance for a San Francisco office building. The design team at Gensler turned the uninspired corridor into a digital art gallery, which reveals itself only when viewed axially and walking directly through the lobby. The hallway now interacts with tenants and visitors as they pass through it, never presenting the same experience twice. Read about this 1st Place winner in the Interior category on page 38.

With a new year approaching, we at **retrofit** look forward to continuing to cover these creative renovation stories for the betterment of our communities, businesses and the environment. Cheers to peace, health and success in 2022!

Christina Koch

CHRISTINA KOCH

Associate Publisher/Editorial Director
retrofit

ONLINE EXCLUSIVE: BETTER BUILDINGS

Check out another edition of **retrofit's** "Better Buildings" content: Contributing Editor Allan Barry examines the benefits of using cover boards in low-slope roofing, including durability, resilience and long-term cost savings. Read the article at www.retrofitmagazine.com/roof-durability-resilience-integrity.



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CONTRIBUTING WRITERS



Touring Pittsburgh's Roundhouse five years ago, it would have been a stretch to visualize the decrepit building as the hub of technology and innovation it is today. **KJ Fields**, a Portland, Ore.-based **retrofit** contributor, describes GBBN's resurrection of this facility that once serviced train engines and redirected cargo. Now transformed into inimitable office space, the project, which is featured on page 18, won 1st Place in the Adaptive Reuse category of this year's Metamorphosis Awards.

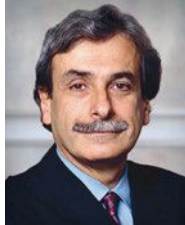


PHOTO: BEN-CHENG

A former Sears Roebuck & Co. store and distribution center and longtime landmark of Boston's Fenway neighborhood has been reimaged by Elkus Manfredi Architects as a dynamic mixed-use destination that complements its high-energy neighborhood while honoring the building's historical significance. **David Manfredi**, FAIA, LEED AP, CEO and founding principal of Elkus Manfredi Architects, writes about this 1st place winner in the Mixed Use category, page 30.



Once a synagogue for the Temple Beth-El congregation and then a facility for the Boys & Girls Clubs of America, a 2-story structure in Chicago's Logan Square neighborhood has again been repurposed—this time into a multifamily building with 14 dwelling units. **Nathan M. Gillette**, AIA, LEED AP O+M, CEM, director of Natura Architectural Consulting, Grand Rapids, Mich., and a **retrofit** editorial advisor, spoke with Luke Marczewski, senior project architect at Pappageorge Haymes Partners, which served as the architect on the project, for a feature on page 40. Now known as the Grand Palmer Lodge, the project earned 1st Place in the Multifamily category of this year's Metamorphosis Awards.



the building's historic fabric while helping the owner achieve its preservation and sustainability goals.

Charles Van Winckle, a vice president in Thornton Tomasetti's Renewal practice, specializes in building forensics, technical architecture and historic preservation. On page 48, Van Winckle writes about a façade restoration project at New York City's iconic Helmsley Building, a 1st Place Metamorphosis Award winner in the Exterior category. The design team used creative strategies and modern technologies to preserve



Josiah Stevenson (left), FAIA, LEED AP, is a principal and **Kevin Bell**, AIA, is an associate with Leers Weinzapfel Associates. The pair write about Anonymous Hall at Dartmouth College, Hanover, N.H. The project reimagines a vacant 1960s medical library building into

a vibrant center for the Graduate School of Arts and Sciences and a social hub for north campus. Featured on page 68, Anonymous Hall won 1st Place in the Addition category of this year's Metamorphosis Awards. (Stevenson served as a judge for the Metamorphosis Awards but recused himself from judging this project.)



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BEHIND THE SCENES

The 2021 Metamorphosis Awards Judges Were Previous Winners

retrofit's third-annual Metamorphosis Awards program tapped four previous winners as judges: Brett Baba, co-founder, Graham Baba Architects, Seattle; Howard Hirsch, AIA, LEED AP, founder and president, Hirsch MPG LLC, Chicago; Josiah Stevenson, FAIA, LEED AP, principal, Leers Weinzapfel Associates, Boston; and Marcy Wong, partner, Marcy Wong Donn Logan Architects, Berkeley, Calif. Each judge was gracious with their time and knowledge.

The jury was asked to evaluate each project on the success with which it met its own requirements. They were told to weigh projects individually—not in comparison to others—and choose as many projects as they felt deserving of winning. [Editor's

Note: Stevenson recused himself from judging Anonymous Hall, the Leers Weinzapfel Associates project that won 1st Place in the Addition category.]

Through a judging platform, jurors were able to review entries and score them on their own time. John Riester, **retrofit**'s publisher, and Christina Koch, **retrofit**'s editorial director and associate publisher, conducted a Zoom meeting with the judges in mid-August to discuss highest-ranking projects, determine placements of winners and speculate about cover possibilities. Winners were notified in late August.

The 2022 Metamorphosis Awards program will open in January 2022 at www.retrofitmagazine.com/metamorphosis-awards.



BRETT BABA

Brett Baba is an award-winning architect with more than 40 years' experience. He is known affectionately within Graham Baba Architects' offices as the "Zen Master" of design and detailing and is the go-to person for staff (new and experienced) when they have questions about how things are done. Graham Baba Architects was recognized with a Metamorphosis Award in the 2019 inaugural competition: Block 41, which won in the Adaptive Reuse category, celebrates the legacy of a 1927 ice warehouse transformed into a contemporary, multipurpose event space. Read the story in the November-December 2019 issue, page 20, or bit.ly/2PWRV0x.



HOWARD HIRSCH, AIA, LEED AP

Howard Hirsch established Hirsch MPG LLC in 1994 to offer architectural and planning services to a wide range of clients on a variety of project types. He has more than 30 years' experience as an architect, designer, project manager and land planner. In 2020, Hirsch MPG earned two Metamorphosis Awards: 1st Place in the Multifamily category for Fields Lofts and 2nd Place in the Whole Building category for Hotel Julian. Read the stories in the November-December 2020 issue, page 40, or bit.ly/3pf6Vpl, and page 64, or bit.ly/3kbMeHx, respectively.



JOSIAH STEVENSON, FAIA, LEED AP

Josiah Stevenson joined Leers Weinzapfel Associates in 1986 and became a principal in 1998. He leads the firm's community and civic projects, giving special attention to how they relate to their historic contexts and our sustainable future. Leers Weinzapfel Associates achieved a 2020 Metamorphosis Award in the Adaptive Reuse category for its work repurposing a 140-year-old railroad depot into a state-of-the-art performing arts center for Middlesex Community College. Read the story in the November-December 2020 issue, page 18, or bit.ly/3kf9xjY.



MARCY WONG

Following graduate degrees in architecture and structural engineering, Marcy Wong practiced in both fields and for a decade was on the faculty of UC Berkeley's Department of Architecture. She and Donn Logan formed Marcy Wong Donn Logan Architects in 1999. The partnership has developed a portfolio of work that expresses their goals of outstanding and environmentally sound design. In 2019, the firm won two Metamorphosis Awards: one in the Interior category for its imaginative use of salvaged wood to transform a 100-year-old building into a photography studio, and the other in the Historic category for repurposing buildings 113 through

116 at San Francisco's historic Pier 70 into the Uber Advanced Technology Group Research and Development Center. Read the stories in the November-December 2019 issue, page 42, or bit.ly/2qrVvVT, and page 76, or bit.ly/33rSGTr. In 2020, the firm was awarded 1st Place in the Historic category, again for Pier 70, but this time for transforming the pier's historic powerhouse into an inventive office space. Read the story on page 66 in the November-December 2020 issue, or bit.ly/3eFiiCw.



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ON THE RIGHT TRACK

An Adaptive Reuse Transports Pittsburgh's Past into the Present

WRITTEN BY | KJ FIELDS

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METAMORPHOSIS
AWARD WINNER!

Touring Pittsburgh's Roundhouse five years ago, it would have been a stretch to visualize the decrepit building as a hub of technology and innovation. The 25,000-square-foot Roundhouse and its outdoor turntable were built by the Monongahela Connecting Railroad around 1887 to service train engines and redirect cargo, and it basically remained without any upgrades since 1997. The building had deep pits in its concrete floor, weeds growing inside, standing water on the slab and the underside of the timber roof decking was blackened by soot. Still, the deteriorating Roundhouse captured the imagination of many, including GBBN Principal Anne Chen, AIA, LEED AP.

"You can envision the trains, and there's a beauty in the functionality of moving the trains that informed the building's curved geometry. It's actually awe-inspiring," Chen says. "But it was a big investment to preserve and adapt the Roundhouse to make it useable. When the Almono partner foundations agreed to do it, I was thrilled."

Partially built into a hillside, the 10-bay Roundhouse stands on a 178-acre riverfront redevelopment of an urban brownfield formerly owned by Jones & Laughlin Steel Co. and then by LTV Steel Co. In 2002, four Pittsburgh foundations

formed the Almono Limited Partnership, or Almono LP, and purchased the site. Called Hazelwood Green, the total development's plan calls for workplace, housing, retail and public spaces integrated into the surrounding community.

Almono LP retained GBBN in 2017 to prevent the Roundhouse's further decay and ultimately design its adaptive reuse. As one of only three historic structures left on the site, the Roundhouse is a showpiece of Pittsburgh's industrial past.

"It's a unique building so clearly representative of its railroad and steel heritage," Chen notes. "Hazelwood Green will be home to many new buildings in the future. The Roundhouse will continue to communicate the site's history, which will enhance the redevelopment overall."

FORWARD MOMENTUM

In February 2019, OneValley decided to make the Roundhouse one of its innovation centers. GBBN worked with the Silicon Valley, Calif.-based company to design an appealing contemporary space that attracts entrepreneurs to collaborative co-working spaces inside and outside the building. At the same time, the project incorporates original features, such as the turntable and operator cab, track rails, crane and attached shed structure.

"Retaining these important elements is a major part of understanding the building's industrial nature," Chen says. "These projects are so few and far between because they're really difficult to renovate, and it takes a group like Almono to be committed to keeping them."

The Roundhouse was constructed as a cavernous double-height space with a small mezzanine. To accommodate OneValley's program and give the large volume a more human scale, GBBN added a partial second floor. The team replaced the bays' garage doors with a curtainwall to bring in daylight and offer views to the outside public area and the Monongahela River beyond.

Historic wood, brick and steel play prominently in the project, but it was a concerted effort to properly preserve them while making the building as thermally sound and energy efficient as possible.

During selective demolition, the contractor discovered the structure was in worse shape than previously thought. Steel columns suffered





PHOTOS: ED MASSERY PHOTOGRAPHY



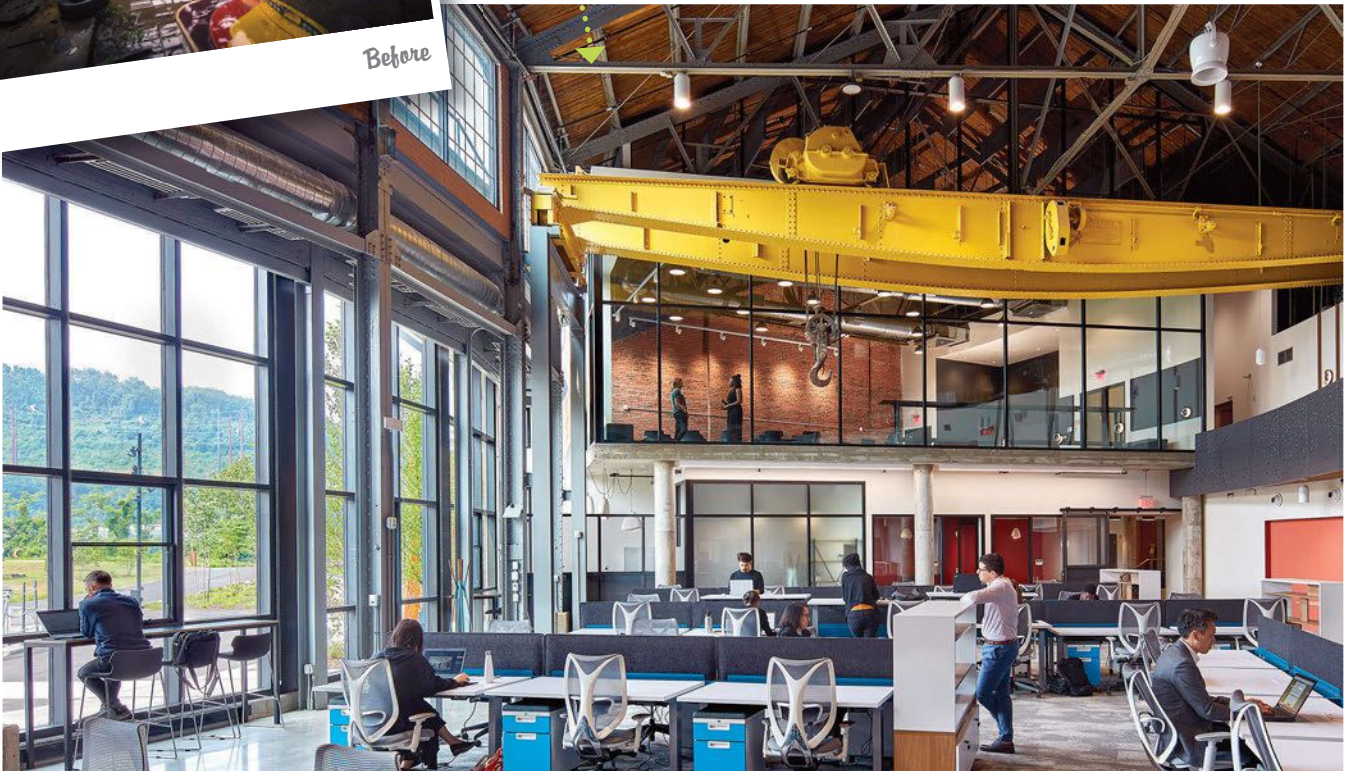
Trees, planters and public art reintegrate fragments of the site's industrial past—its turntable, the steel frame of an old shed—into the landscape of the Monongahela River.



Before



Before



“The before was so bad and the after is so good. I love the exposed and reused elements, like the crane.—*Josiah Stevenson, FAIA, LEED AP, principal, Leers Weinzapfel Associates*”

from extensive corrosion and the column bases had to be encased in concrete for stabilization. Some columns required additional support, and the team spliced in new steel elements. Many of the steel trusses also needed steel reinforcement.

The underside of the wood roof decking was cleaned, and the team replaced the structure's dilapidated exterior roof. At the roof gables, historic metal vents once exhausted heat from the industrial space. A large amount of insulation was added above the decking for energy efficiency, which required the contractor to remove the roof vents, rebuild them and replace them after construction.

The desire to preserve the interior crane also demanded its removal during construction. Reinstalling it became a delicate procedure; the

contractor had to thread the crane through the roof-vent openings to bring it inside.

GBBN created a new slab and the partial second floor out of concrete because it allowed for a thinner structure to facilitate occupant head room. Semi-circular, the second floor remains sympathetic to the curve of the original architecture.

“Using concrete was a really effective design strategy,” Chen asserts. “The second floor seems to float within the space and it's spare, allowing occupants to easily see the steel trusses. The contrast of the contemporary concrete against the original steel creates a fluid separation between the new and the old.”

One aspect of the interior renovation, however, combines current technologies with traditional material: the customized guardrail

panels on the partial second floor. Made of carbon steel, the guardrail's perforated panels were digitally designed. Then, the computer files were provided to the metal fabricator who programmed the pattern into laser-cutting equipment.

Chen notes modern computerization was precisely what made the guardrail feasible. “Creating a piece like that from hand would have been too expensive to be considered for the project,” she says. “I love the mix of using the digital process with the steel—a material so ingrained in Pittsburgh's history.”

FULL CIRCLE

Hazelwood Green will be reviewed under Pittsburgh's p4 Performance Measures, a tool to evaluate real-estate development projects.

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ECOSMART GYPSUM WALL BOARD FROM USG, www.usg.com
PINNACLE RED LIST FREE RUBBER WALL BASE FROM ROPPE, roppe.com
KINETICS HARSHIDE ACOUSTICAL PANELS, kineticsnoise.com, WITH MESSENGER FABRIC WRAP FROM MAHARAM, www.maharam.com
CUSTOM WALLCOVERING AND CUSTOM SCREEN-PRINTED TILE FROM MODESTO STUDIOS, www.modestostudios.com
SPEEDHIDE ZERO VOC WALL PAINT FROM

PPG, www.ppgpaints.com

3 BY 9 EXTRUDED DECLARE LABEL TILE FROM LIMELIGHT TILE & CERAMICS, limelighttile.com

ROOFING //

ASPHALT SHINGLES: GAF TIMBERLINE HDZ SHINGLES, www.gaf.com

WINDOWS AND TREATMENTS //

CURTAINWALL, STOREFRONT AND WINDOW SYSTEMS: KAWNEER, www.kawneer.com
HELIAISE AND MOTORISE WINDOW SHADES WITH PVC-FREE FABRIC FROM WT SHADE, wtshade.com

DOORS //

LOCALLY SOURCED RECLAIMED DOORS FROM DOORS UNHINGED, doorsunhinged.com

LIGHTING //

BALANCE LIGHT BY STAK CERAMICS, www.stakceramics.com
WALLACE PENDANTS BY SPACAPAN, margaretpacapan.com
SMOKE PENDANT BY PITTSBURGH GLASS CENTER, www.pittsburghglasscenter.org
VESSEL SCONCES AND BLAZE SCONCES FROM MODERN FORMS, modernforms.com
SUSPENDED FIXTURES FROM AMERICAN LINEAR LIGHTING, americanlinearlighing.com
CYLINDRIX TRACK LIGHTING FROM AMERLUX, www.amerlux.com
HALO HCC4 FIXTURES FROM COOPER LIGHTING SOLUTIONS, www.cooperlighting.com

SIGNAGE //

CUSTOM-DESIGNED WOOD SIGNAGE FROM ROOST DESIGN BUILD, www.pgandh.org/makers/roost-design-build
CUSTOM EXTERIOR SIGNAGE FROM TECHNIQUE ARCHITECTURAL PRODUCTS INC., www.techniqueap.com

CUSTOM INTERIOR ITEMS //

CUSTOM KITCHEN ISLAND FROM BONES AND ALL, www.bonesandall.com
CUSTOM RECEPTION DESK FROM TEMPER AND GRIT, www.temperandgrit.com
CUSTOM BIKE RACKS FROM TECHNIQUE ARCHITECTURAL PRODUCTS INC., www.techniqueap.com

SITE ELEMENTS //

CUSTOM ROLLING CART SEATS AND EXTERIOR TRASH CANS FROM TECHNIQUE ARCHITECTURAL PRODUCTS INC., www.techniqueap.com
TRANSITION BIKE RACK FROM TRANSIT FORGE, transitforge.com
ATLAS BENCH FROM TEMPER AND GRIT, www.temperandgrit.com
ASH DECKING FROM THERMORY, www.thermoryusa.com

ARTWORK //

CUSTOM HISTORIC SITE PRINTS FROM ABANDONED PITTSBURGH, abandonedpittsburgh.com



The “p4” refers to people, planet, place and performance. The Roundhouse is the first project in Hazelwood Green tracked to these standards.

Set to achieve LEED Gold certification, the Roundhouse’s adaptive reuse incorporates environmental stewardship into a human-centered design.

OneValley’s main floor hosts open workspaces, office suites, a training room, formal conference room and smaller conference rooms. Telephone huddle rooms provide spaces for private conversations. A bike room with showers encourages alternative transportation to the site, and a café gives occupants an informal place to gather and collaborate. The structural frame of an old shed serves as a welcoming outdoor overflow space next to the café. The second floor has a large event space, open workstations, another training room and small office suites.

Almono LP included Monmade, a non-profit organization that curates, coordinates, and purchases artisan design and products from regional manufacturers, in the project. These locally designed and manufactured elements, which include a custom reception desk and wood kitchen island, ceramic pendant lighting fixtures, wood signage for room

identification, and kitchen and bathroom tile, infuse the Roundhouse with character. Bike racks, outdoor signage and moveable, mounted benches on the turntable also were sourced through Monmade.

“The beautiful pieces add a uniqueness to the project,” Chen notes. “And supporting the regional artisan economy so they can thrive is sustainable on so many levels.”

The turntable is now the centerpiece of a relaxing public space connecting to the surrounding Hazelwood neighborhood through bike trails and bus routes.

“The Roundhouse shows the evolution from steel to an innovation-based workforce and serves as a successful demonstration model for historic projects like these,” Chen says. “It’s a really wonderful investment in the future—not just the for the next generation but for generations to come.” 



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HELPING HAND

A Shuttered School Is Repurposed into a Youth Center that Helps Young Adults Reach Their Full Potential

When unsheltered students age out of the foster care system or out of the child welfare system altogether, they are left with limited public and private resources. Their remaining services are often only available for restricted hours of the day, leaving many without a place to go after 8 p.m. With an estimated 4,000 students in the Dallas Independent School District (DISD) considered homeless, Jorge Baldor, founder of After-8toEducate, saw the need for a place where unsheltered students and youth could access services, educational support and shelter. In response, the Fannie C. Harris Youth Center was established as the first all-encompassing three-pillar program to support unsheltered DISD high-school students and to support the immediate needs of other homeless young adults, ages 14 to 21.

The project seeks to continue its namesake's legacy of overcoming adversity and reaching one's full potential. Fannie Chase Harris, the daughter of a slave and the master's son, was born on a plantation in Harris County, Georgia. Once freed, Fannie and her adopted aunt moved to Columbus, Ga. After finishing at a Quaker public school, she attended Clayton Normal School,

which prepared her for teaching. She came to Texas and began her career as a teacher, first in Corsicana and then Dallas, where she became one of the first three teachers at Dallas High School for African American children. In 1951, a Dallas Independent School was named in her honor. Fannie C. Harris Elementary School closed its doors in 2013 after serving as the Dallas ISD administration building for some time. It sat vacant for five years before community stakeholders identified it as the location for the new youth center.

The Fannie C. Harris Youth Center offers a "drop-in" center with access to meals, showers, a computer lab, laundry and counselors who provide mentorship, as well as medical and mental health referrals as needed. The space, graced by a mural designed by Cuban-born Dallas artist Rolando Diaz, has a modern, comfortable feel with plenty of communal space for dining, working on homework, collaborating or relaxing.

The 20,000-square-foot residential side features a 26-bed wing for emergencies, nearly doubling the existing Emergency Youth Center's capacity, and nine beds to support the Transitional Living Program. Residential areas also include collaboration space, a library, podcast and recording studio, full-service

kitchen and dining area, individual and family counseling rooms, and offices for the directors and counselors.

The Fannie C. Harris Youth Center offers a solution to allow unsheltered high-school students to develop academically, emotionally, and socially to ultimately live healthy and productive lives. 

Retrofit Team

DEVELOPER // After8ToEducate, after8toeducate.com

ARCHITECT // LRK, www.lrk.com

GENERAL CONTRACTOR // RUDICK Construction Group, rudickgroup.com, and Sky Contracting, (469) 309-1892

MEP ENGINEER // Sutton Eldridge Engineering LLC, suttoneldridge.com

Materials

STEEL SIDING // Corten Weathering Steel, A606, from Metaltech Global, metaltchglobal.com

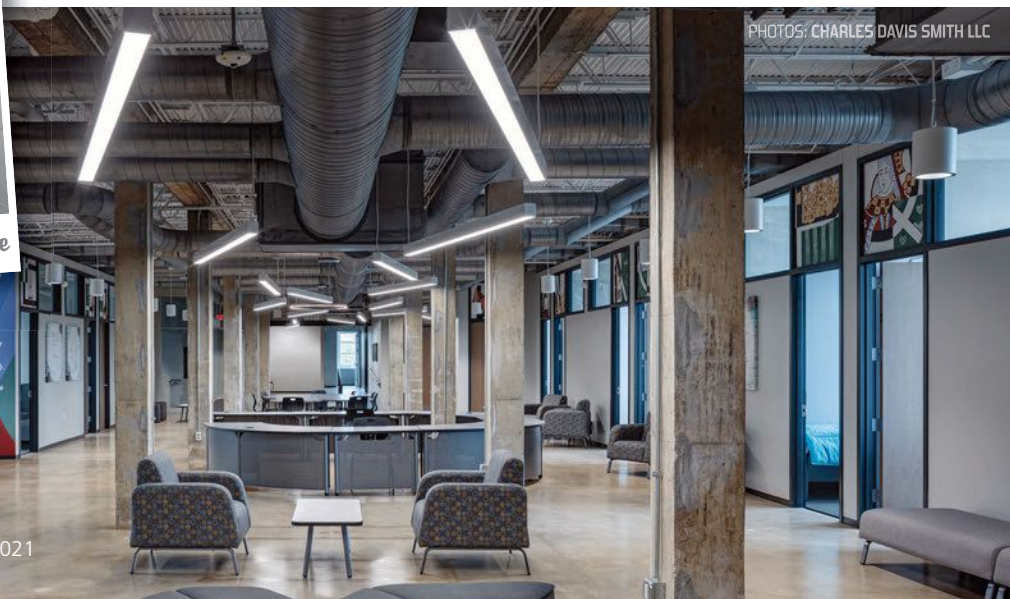
WOOD SIDING AND SLATS // Western Red Cedar, www.realcedar.com

PAINT // Sherwin-Williams, www.sherwin-williams.com

METAMORPHOSIS
AWARD WINNER!



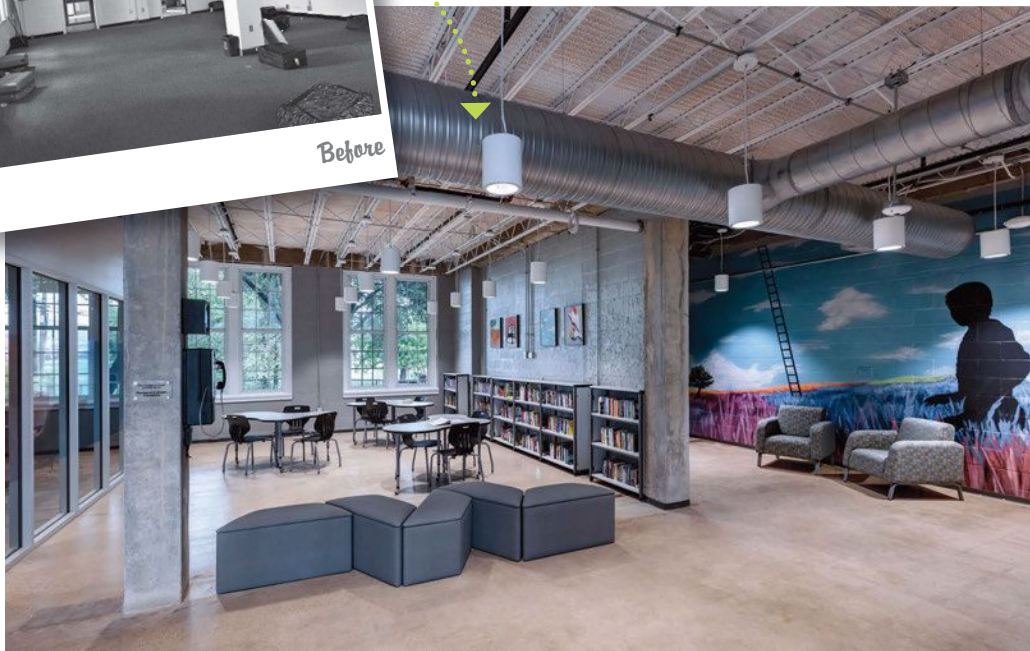
Before



PHOTOS: CHARLES DAVIS SMITH LLC



Before



Judge's Comment

“ Fun, artful, excellent mission. I like how they kept the grittiness of the original structure. Nice transparency and connected spaces. —Brett Baba, co-founder, Graham Baba Architects ”

RETROFIT MAGAZINE
**METAMORPHOSIS
AWARDS**
Winner

CRAFTING COMMUNITY

An Industrial Facility Now Exhibits, Retails and Educates about the Craft Arts

For more than 30 years, Contemporary Craft has provided free access to high-quality arts and creative experiences for all. When the organization sought to secure its future by purchasing a new home, it was essential that the building meet the client's budget while reinforcing its identity as a friendly, dynamic space, where diverse people can gather.

An old concrete masonry building—one that was not designed with human comfort or community in mind—might not seem like a good candidate to meet these needs. But the GBBN design team and the craft-oriented client saw the potential to transform a modest,

previously industrial concrete box in Pittsburgh into a showcase for Contemporary Craft's programming while reflecting the organization's mission by highlighting the joy that craftspeople uncover via the materials of the building itself.

OPENING UP, WELCOMING COMMUNITY

The renovation takes a nondescript building, which was previously closed in on itself, and opens it up to the community. The addition of a rolling glass garage door and two dramatic, punched storefront openings creates views into the building, allowing passersby to glimpse the activity within its studios, gallery and retail space.

Beyond views to the inside, the exterior itself is enriched. The addition of a textured brick pattern enhances the façade while layered aluminum tubes and sonar-inspired, patterned panels around the entrance create an animated effect that comes alive as people pass by.

FUNCTIONAL AND INVITING

The exterior is designed to invite the community in, and a beautiful, custom-crafted reception desk creates a center of gravity to welcome and orient visitors. What was once a dark, industrial space is now an open and airy floorplan, where visitors easily move between the gallery and retail shop. For functional reasons, the studios are separated by walls.

Behind the reception desk, a new clerestory structure brings light and introduces a view to the sky overhead while a striking steel stairway provides access to Contemporary Craft's second-floor office space.

EXPRESSION OF CRAFT

From the spalted maple—whose dark-veined, marble patterns are created by fungus when the tree is allowed to decay in the forest—reception desk and displays to the textured brick façade, the whole building expresses the value of craft. By transforming a humdrum building—the kind that dots the landscapes of our cities—Contemporary Craft's new space manifests the transformative power of craft while welcoming its community, new and old, into its new space. 

Retrofit Team

ARCHITECT // GBBN, www.gbbn.com

- Mick McNutt, AIA
- Anne Chen, AIA, LEED AP
- Melanie Ngami

GENERAL CONTRACTOR // Jendoco Construction Corp., <https://www.jendoco.com>

METAL FABRICATION // Gray Welding & Fabrication Services, graywelding.com

WINDOW RESTORATION AND REPAIR // Southwest Aluminum & Glass Co., (412) 257-9500

STRUCTURAL ENGINEER // WBCM, wbcm.com

MEP ENGINEER // WNA Engineering, wnaengineering.com

ENERGY MODELING // 3R Building Sustainability, www.3rsustainability.com

Materials

CURTAINWALL AND STOREFRONT //

Kawneer, www.kawneer.com

METAL SIDING // ATAS International, www.atas.com

CUSTOM SPALTED MAPLE VENEER // Deep Greene Woodworks, www.monmade.org/designers/deep-greene-woodworks

DOORS // Doors Unhinged, doorsunhinged.com

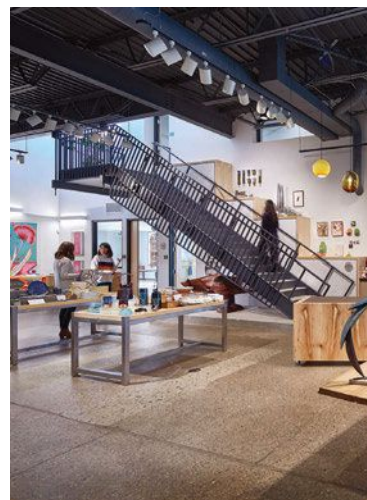
FURNITURE // Kelly Custom Furniture & Cabinetry, www.kellyfurniture.com

METAMORPHOSIS
AWARD WINNER!

Judge's Comment

“Very inspiring project. Beautifully executed inside and out. I easily can see how this transforms the community.”

—Brett Baba, co-founder, Graham Baba Architects





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retrofitmagazine.com // **RETROFIT 27**

BEACON OF HOPE

A Partially Abandoned Mall Is Transformed into a Community-focused, Multi-generational Facility

What began as a desire to expand, enhance and provide facilities that are more efficient for members of the John E. Alexander South Wood County YMCA, Wisconsin Rapids, Wis., ultimately resulted in a much broader catalytic project driven by the YMCA's mission to support the health and wellness needs of the greater south Wood County region.

Through the planning process, the Y evaluated and explored numerous partnering opportunities, ultimately determining that partnering with the Boys & Girls Club of the Wisconsin Rapids Area would result in the community's largest provider of youth development services. The YMCA also collaborated with the Department of Veteran's Affairs to develop a community-focused, multi-generational facility. The project team, including Zimmerman Architectural Studios Inc., identified and generated plans for an adaptive reuse of a failing, partially vacant and centrally located municipal mall property, further enhancing the value of the project in the community.

The design features a central mall-like corridor providing a seamless connection between the development's new and renovated spaces while simultaneously highlighting the Y's key amenities to entice prospective new members. Floor to ceiling storefront windows, inside and outside the building, showcase the center's natatorium, gymnasium and fitness center. A primary entrance at one end of the corridor greets Y members and families while a secondary entry point at the opposite end provides secure access to the Y's early learning center. Each entry has dedicated parking and drop-off areas. Respite spaces throughout the corridor facilitate socialization and connection among members and staff.

The project realized substantial value and savings through adaptive reuse of the mall's existing facilities, including building shell, foundations, cladding and roof. Further economic enhancements realized by the project include reduced site preparation and improvement costs, including utility feeds and sewer laterals, as well as salvaged pedestrian sidewalks and

parking area sub-surface materials.

The existing facility includes administration offices; fitness; childcare; early learning center; a food preparation and demonstration kitchen; kids adventure center; VA clinic; and the Boys & Girls Club facilities, which feature a teen area, multipurpose rooms, a variety of classrooms and quiet areas and spaces to support STEM, arts and music education. The YMCA's wellness center, group exercise studios, gymnasium, locker facilities, natatorium and central circulation corridor are all new construction. The Y's second floor includes a walking track, which surrounds the perimeter of the gymnasium space, and additional fitness spaces that separate the high bay gym and natatorium structures. Demolishing several existing facilities made way for the new construction.

All of the spaces are designed with great detail and focus. Input was gathered from the community, as well as staff relative to the application of materials, lighting design, acoustic control, and maintenance and safety. Floor to ceiling glass storefront windows are utilized on the building's exterior and interior to showcase environments while allowing daylight into most areas of the facility and improving views in and out. Bright and vibrant colors were applied to provide bursts of color energy to align with the motivational branded graphics throughout the facility. Products used are extremely durable with low-maintenance requirements to enhance return on investment and provide long-lasting solutions.

The \$28.5 million project utilized fundraising as the primary capital-generation device, as well as new market tax credits. The project broke ground in August 2018, continued construction through the height of the COVID-19 pandemic and opened to members June 1, 2020. A month after opening, 419 new memberships had been sold and the facility was averaging 130 percent of normal visits at a time when other YMCA's experienced a 50 percent or more drop because of COVID. The facility has been a beacon of hope for many in the community and a hub for supporting youth, adults and families in their quest to improve spirit, mind and body. 

Retrofit Team

METAMORPHOSIS
AWARD WINNER!

ARCHITECT OF RECORD, DESIGN ARCHITECT, INTERIOR DESIGNER AND LANDSCAPE ARCHITECT // Zimmerman

Architectural Studios Inc., www.zastudios.com

STRUCTURAL, CIVIL, ELECTRICAL, MECHANICAL, PLUMBING AND FIRE PROTECTION ENGINEER // Harwood

Engineering Consultants, www.hecl.com

CONSTRUCTION MANAGER // Miron

Construction, www.miron-construction.com

AQUATIC CONSULTANT/ENGINEER // Water Technology Inc., watertechnologyinc.com

Materials

SOLID SURFACE // Wilsonart, www.wilsonart.com

METAL WALL PANELS // Larson by Alucoil, alucoil.com/northamerica

ROOF SYSTEM // Versico Roofing Systems, www.versico.com

SKYLIGHTS // Versico Sunpath Tubular Skylight, bit.ly/3tY5izK

ACOUSTICAL CEILINGS // Ultima from Armstrong Ceiling & Wall Solutions, www.armstrongceilings.com

WOOD ATHLETIC FLOORING // Infinity Wood Floors, www.infinitywoodfloors.com

OPERABLE PARTITIONS // Hufcor, www.hufcoramericas.com

TELESCOPING BLEACHERS // Interkal, www.interkal.com

PLAYGROUND EQUIPMENT // PlayPower, playpower.com

SCOREBOARDS/TIMING SYSTEMS // All American Scoreboards, www.allamericanscoreboards.com

LOCKERS // Am-Finn, am-finn.com
SHOWER/TOILET PARTITIONS // Special-Lite, special-lite.com

POOLS

ACCESS RAMPS/STAIRS AND LADDERS/ GRAB BARS // Spectrum Aquatics, www.spectrumproducts.com

BULKHEADS, HEATERS, SANITIZATION SYSTEMS AND STARTING BLOCKS //

Neuman Pools Inc., neumanpools.com

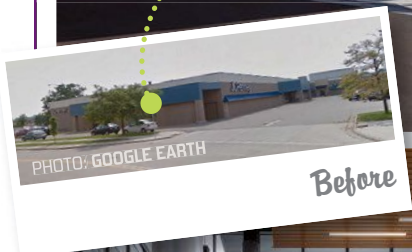
CHEMICAL CONTROL SYSTEMS // BECS Technology Inc., www.becs.com

CLEANERS/VACUUMS // Sta-Rite, www.pentair.com/en-us/brands/sta-rite.html

DECK/BASIN SURFACE AND GUTTERS // Paddock Pool Equipment Co., www.paddockindustries.com

FILTRATION SYSTEMS // Neptune Benson Inc., www.evoqua.com/en/brands/neptune-benson

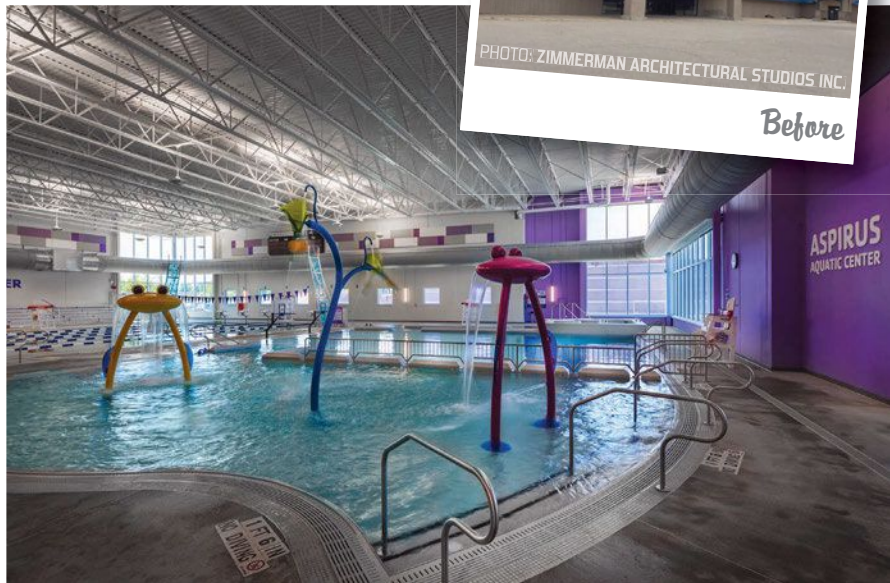
WATER PLAY FEATURES // Vortex, www.vortex-intl.com



Before



Before



Judge's Comment

“ Reusing a mall is so laudatory. This is an answer to ways to reinvigorate older mall properties that are less vital in communities throughout the U.S. The natural light and exterior connections are appreciated. — Brett Baba, co-founder, Graham Baba Architects ”



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NEIGHBORHOOD CORNERSTONE

A Former Sears Store and Distribution Center in Boston's Fenway Neighborhood Connects to the Public Realm through Design and Programming

WRITTEN BY | **DAVID MANFREDI, FAIA, LEED AP**

Developers Samuels & Associates collaborated with Elkus Manfredi Architects to reimagine the former Sears Roebuck & Co. store and distribution center, a longtime landmark of Boston's Fenway neighborhood. The developers imagined it as a dynamic mixed-use destination that would complement the high-energy neighborhood while honoring the building's historical significance.

Opened in 1928, the Sears store, warehouse and distribution center—an 8-story limestone and brick commercial building with a 12-story iconic tower centered above the southwest elevation—was a retail powerhouse serving all of New England and parts of New York for 60 years. After drawing shoppers and employees to the Fenway neighborhood for decades, Sears abandoned the nearly 1 million-square-foot building in 1988. Soon after, it was protected from demolition when it became an official Boston Landmark and was listed in the National Register of Historic Places. The building reopened in 2000 as the Landmark Center with a movie theater, office spaces and big-box retailers with the parking lots to match.

By the late 2010s, the Fenway area had evolved, leaving the Landmark Center behind. The neighborhood had enjoyed

a renaissance over two decades with numerous projects that transformed the area into a dynamic, pedestrian-oriented live/work/play community. The Landmark Center's retail and dining mix now was out of step with the changing neighborhood; its office spaces were underused; and its architecture was obscured by 20th century renovations. The Fenway has become an innovation district with science and technology, startups and incubators, and the Sears building had all the essential infrastructure and character to attract another generation of tenants and guests.

The stately landmark had potential to be a neighborhood magnet. With a connective public realm that welcomes workers, residents and visitors alike, the developers envisioned a vibrant, mixed-use destination that links Boston's Fenway and Longwood Medical neighborhoods and engages the newly restored Muddy River link of Frederick Law Olmstead's Emerald Necklace park system, which includes 1,100 acres of parkland extending from Boston's Back Bay through Brookline and Jamaica Plain to Franklin Park in Dorchester.

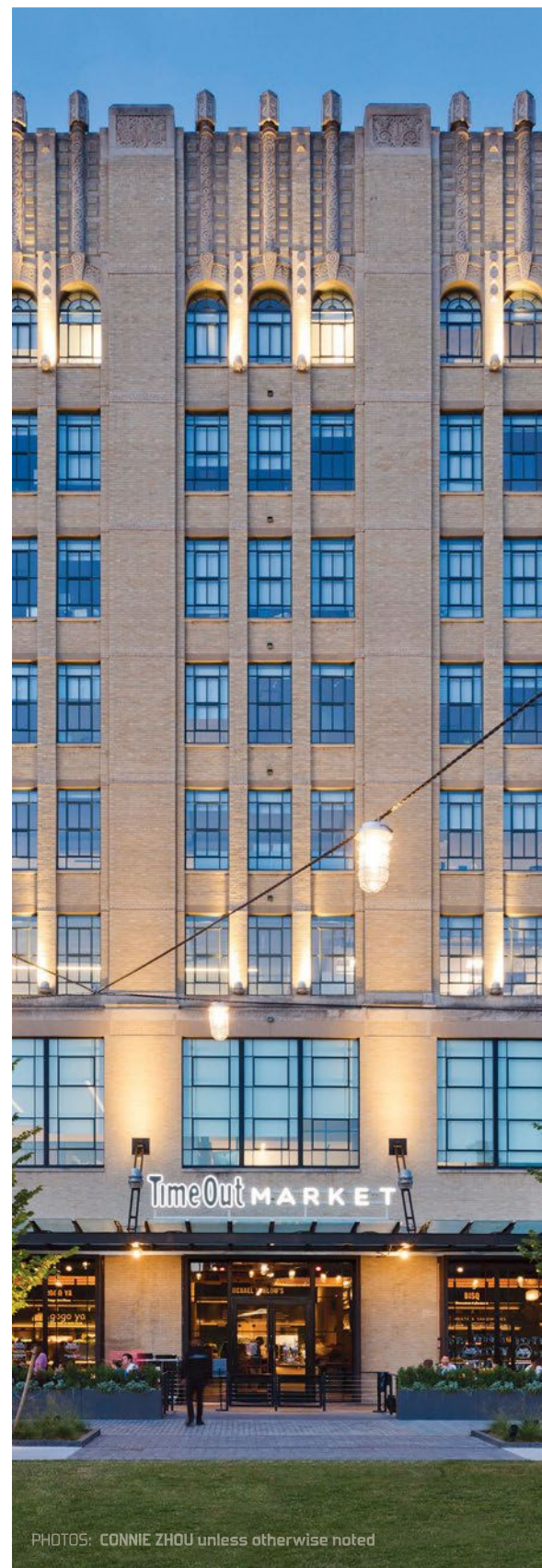
NOTABLE DESIGN

A laser-focused attention to historic architectural detail started with designers

Judge's Comment

“Fortunately, the interventions were not shy, spatially or in detailing, making possible so dramatic and successful a result both internally and externally.”

—Marcy Wong, partner, Marcy Wong Donn Logan Architects



PHOTOS: CONNIE ZHOU unless otherwise noted

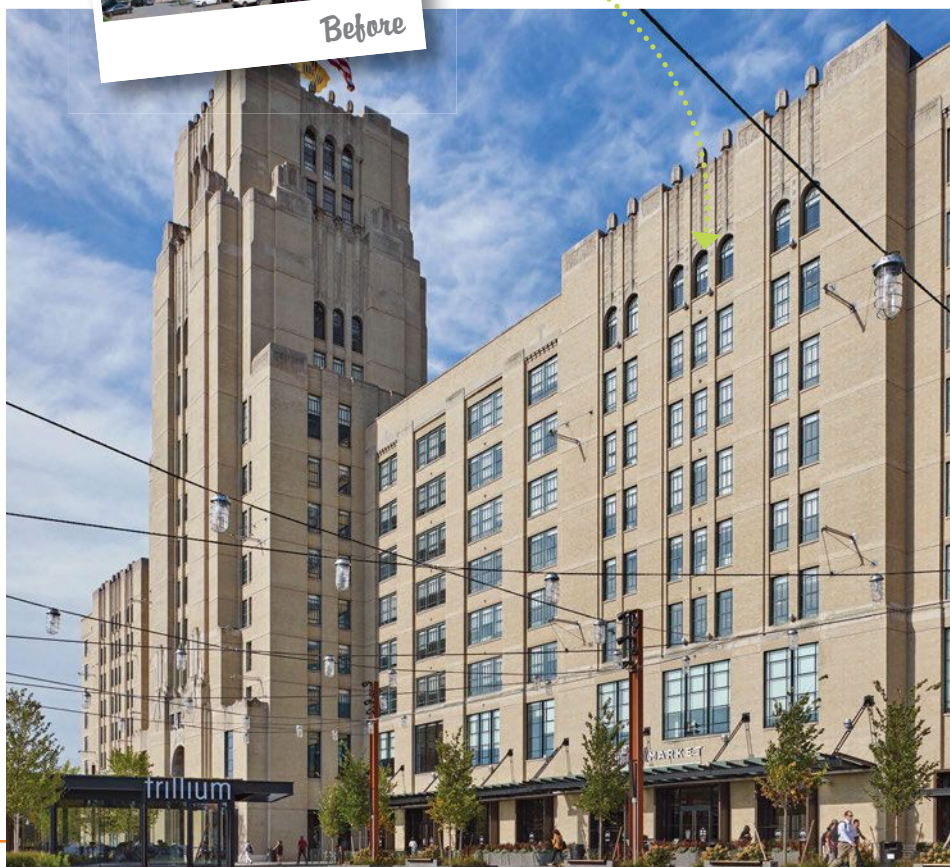


PHOTO: ROBERT BENSON

Retrofit Team

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**MASTER PLANNER, ARCHITECT AND
INTERIOR ARCHITECT //** Elkus Manfredi
Architects, www.elkus-manfredi.com

GENERAL CONTRACTOR // Suffolk,
www.suffolk.com

STRUCTURAL ENGINEER // McNamara
Salvia Structural Engineers, www.mcsal.com

MEP ENGINEER // WSP, www.wsp.com

LIGHTING // HDLC Architectural Lighting
Design, hdlclighting.com

CIVIL ENGINEER // VHB, www.vhb.com

TRAFFIC // Walker Consultants,
walkerconsultants.com

LANDSCAPE ARCHITECT // LeBlanc Jones
Landscape Architects, www.leblancjones.com

GEOTECHNICAL ENGINEER // McPhail
Associates, www.mcphailgeo.com

LEED CONSULTANT // The Green Engineer,
www.greenengineer.com

OWNER // Alexandria Real Estate Equities
Inc., www.are.com

PROPERTY MANAGER // Samuels &
Associates, www.samuelsre.com

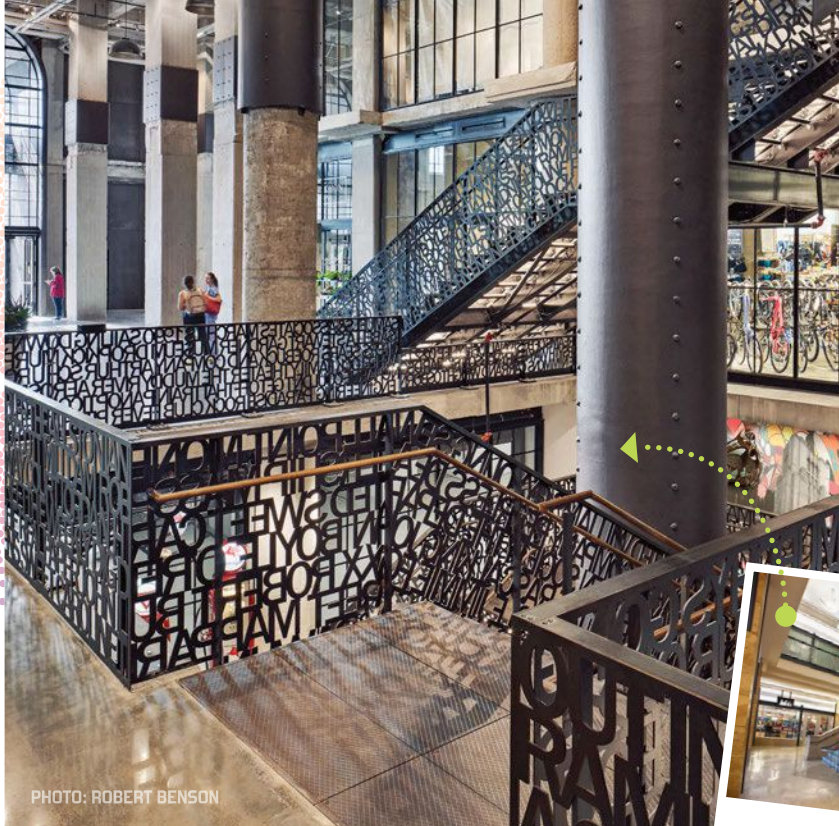
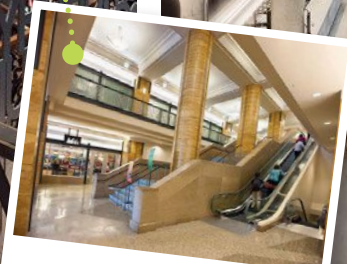
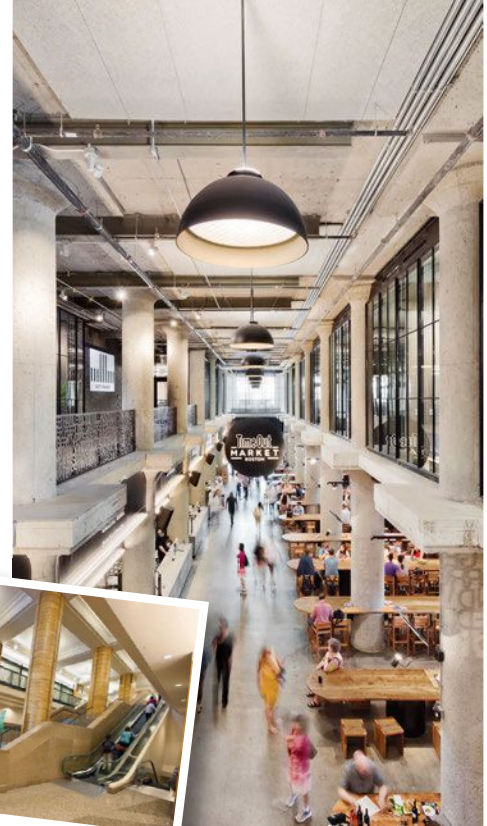


PHOTO: ROBERT BENSON



Before



asking: What kind of building is this? What are its true design roots? Its original Art Deco elements had been minimal; however, interim renovations overemphasized these attributes.

Opting to celebrate the building's mercantile design roots as more genuine, designers took the building interior back to its infrastructure, removing the Art Deco motifs that had been added over the years. Design features now include exposed concrete columns and steel metal frames on windows and storefronts. Pneumatic tubes that were used to move merchandise throughout the complex inspired industrial design of architectural elements, such as light fixtures, staircases and security desks.

With a fresh, authentic canvas and vision to create a grand entrance under the tower and open a connection to Brookline Avenue, Elkus Manfredi Architects' design team removed large sections of the second floor to create a new social entry space and a grand food hall. This connected the office lobby on Park Drive to the new entrance on Brookline Avenue while providing more light to the ground-level entrance lobby and new food hall. Architects and engineers collaborated closely with much back and forth to determine the optimal way to achieve this design. Steel collars around the columns reinforce the newly created 2-story spaces. The transformed lobby—the new heart of the historic building—connects the public spaces to office tenants and visitors like never before.

Activating the public realm also included

reimagining outdoor spaces.

Working with Leblanc Jones Landscape Architects, the suburban surface parking was converted into a new 1-acre public park that connects to Frederick Law Olmstead's Emerald Necklace. A glass pavilion set to the side of the 1-acre park hosts a top-tier local brewery and tap room.

Efforts to enhance the building's porosity at the pedestrian level encourage greater interaction and opportunities for connection between the building and neighborhood. For example, garage-door windows that open in nice weather blur the lines between inside and out at the food hall. Spacious paths connect the highly walkable neighborhood with public transportation. A significant new installation of outdoor sculpture—*Grouping of Works from Fountain*, 2017-19, created by Brooklyn artist Nicole Eisenman—enlivens the 1-acre park.

BUILDING HIGHLIGHTS

The design team created space for a new 25,000-square-foot dining/food hall developed by Time Out Market with multiple stalls from well-known and up-and-coming chefs. Communal dining tables are located inside and outside, connected via new, fully operable storefront windows that fold up and away in nice weather. Open to the floor above with new glazing on the second and third floors, the design allows light to filter in from above.

The food hall leads into the 2-story ground-floor lobby, also accessible from the main entry, with comfortable living-room



The three-level iron staircase railing is custom-designed with Boston-centric words, places and historical moments. An interactive digital display features flip panels that sound like old-time railroad station arrival and departures boards.



PHOTO: ROBERT BENSON

401 Park's ground-floor lobby features massive original columns and pieces of the second-level floor plate that recall the original building and create a dramatic sense of scale.

Materials

BIRD CAGE ELEVATOR // Elevator Interior Design, www.elevatorid.com, and Otis Elevator, www.otis.com

CAST IRON STAIRS // O.K. Foundry Co. Inc., okfoundry.com, and Superior Rail & Iron Works Inc., superiorrail.net

WATERJET-CUT LETTERED RAILING // Superior Rail & Iron Works Inc., superiorrail.net

WOOD FLOOR // Reclaimed Factory Maple from Longleaf Lumber, www.longleaflumber.com

MILLWORK // Valiant Industries Inc., www.valiantind.com

INTERIOR STEEL WINDOWS AND DOORS // Hope's Windows Inc., hopeswindows.com

CUSTOM OPERABLE STOREFRONTS // Turner Exhibits Inc., www.turnerexhibits.com

EXTERIOR CANOPY GLASS // Forms+Surfaces (formerly Berman Glass), www.forms-surfaces.com/castglass



seating areas that invite casual collision of guests. Massive original columns and pieces of the second-level floorplate recall the original building and create a dramatic sense of scale. A new custom-designed, three-level industrial iron staircase features an eye-catching rail with a running list of Boston-centric names and places, which is as much a conversation piece as a functional fixture that leads up to the second level or down to valet parking beneath the building.

The big-box retailers at ground-level have been replaced with urban-focused shopping opportunities that respond to the vibrant, walkable Fenway neighborhood.

Two daylight atria with glass ceilings were renovated and have become amenity extensions of the office spaces that occupy the upper floors.

A thoughtfully curated public art program includes artifacts that celebrate the building's history as a Sears warehouse and distribution center by displaying artifacts that once appeared in Sears catalogs.

COMMUNITY HUB

After a design process that included extensive engagement with the community, the Landmarks Commission and Parks Department, 401 Park—now owned by Alexandria Real Estate Equities Inc. with Samuels & Associates as property manager—is once again a vibrant and vital community hub that remains true to its roots.

The successful execution of a grand vision for a center of 21st century innovation and acute attention to detail resulted in a space that inspires collaborative creative thought, welcomes visitors and fosters community in a fiercely proud Boston neighborhood. Repurposing this existing building is not only a more sustainable choice, it honors the rich history of this neighborhood cornerstone and a part of our collective national history, reusing and repurposing an underutilized property by reimagining its possibilities. 



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COMPLEX BLEND

An Office Building's Tenant Spaces Are Enhanced while Embracing Its Post-modernist Features

Designed in the late 1980s by the iconic Philip Johnson, the original Franklin Square embodied the theatrical post-modernist style Johnson gravitated toward in the second-half of his career, with 20-foot-tall fluted columns, marble floors and bronze grillwork canopies. Four decades later, the Hickok Cole design team was tasked with modernizing 30,941 square feet of public tenant space to restore Franklin Square's prominent reputation in Washington, D.C., and enhance its street presence, while preserving its post-modernist character.

A new custom structural glass wall system made with 25-foot, 8-inch-tall vision panels, supported by 1.0625-inch-thick laminated structural fins, showcases a grand double-height entry sequence and creates a direct visual connection to Franklin Square Park—the building's namesake—across the street. For a seamless indoor-outdoor experience, the system's four 25-foot bays are intentionally designed without visible steel connections. To provide the system with the necessary structural support, the project team elected to conceal the steel outriggers within the existing interior stone columns, simultaneously allowing them to preserve the building's original stonework.

An extended ground-floor footprint captures what was previously deep-set arcade space below the third floor for tenant use. Four custom backlit glass fixtures, fastened to the underside of the main entrance canopies, replace the building's original shadow-casting canopy grills. Illuminated by thousands of LED panels and suspended 25 feet above ground, the fixtures extend through the lobby lounge and past the reception desks, attracting the attention of passersby and emphasizing the building's depth and dramatic ceiling heights from afar. The fixtures culminate 105 feet later at the new café. Serving to further extend the lobby environment, the café bar and lounge were introduced by removing a wall behind reception and replacing what was the property management office, now located at the concourse level.

Inside, hospitality-inspired velvet and leather furniture, custom artwork and lighting, as well as leather-padded walls, bring warmth to the space and contrast the cool tones and dramatic quality of the preserved marble floors and 2-story fluted columns. The strategic incorporation of leather and velvet, as well as finishes, also help to reduce echo and glare caused by the abundance of stone and glass in the space. Peony murals—inspired by Johnson's home garden—at the elevators, petal-detailed chandeliers in the café and other floral details lend an organic quality to the building's linear geometry.

furniture and neutral colors that can be easily modified for future working styles and evolving tenant needs. Small meeting spaces can convert to private offices, the conference center can be used for events or as rentable space, creating an additional revenue stream for the client.

To honor the building's history and character, the most unique architectural elements from the exterior were preserved and repurposed throughout the space as décor, including bronze grillwork used as privacy screens for the concourse meeting rooms and several cast floral medallions integrated in the café walls.

Judge's Comment

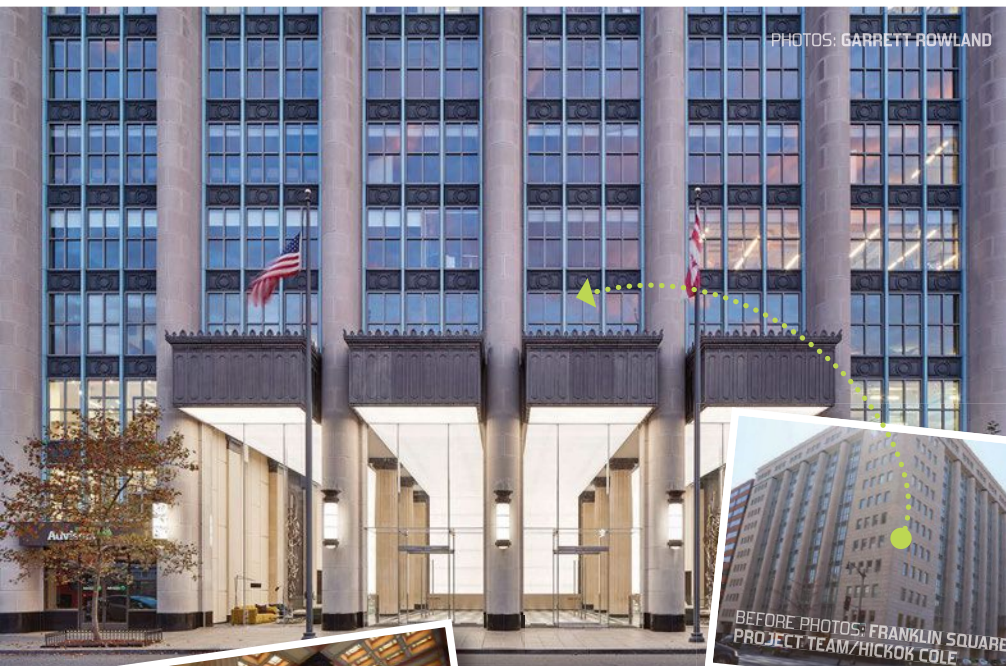
“The beautiful ceiling of light is a great insertion.”
—Josiah Stevenson, FAIA, LEED AP, principal, Leers
Weinzapfel Associates

In the lobby, 33-foot-tall custom sculptures hang above two new slab openings and guide visitors toward a monumental stair. The stair connects the lobby to a concourse level, which had served as an underutilized storage area. To maximize accessible tenant spaces and provide new amenities, designers transformed the concourse into a large conference facility with catering capabilities and several smaller meeting rooms, as well as a state-of-the-art fitness center. To emphasize continuity of the design concept, piers on the concourse mimic the lobby's bold fluted columns and create the illusion that they're extending directly through the floor. On the opposite end of the lobby, a second slab opening, wrapped in glass railing, offers a glimpse of the concourse level from above while both slabs allow natural light from the curtainwall entrance to reach the lower level.

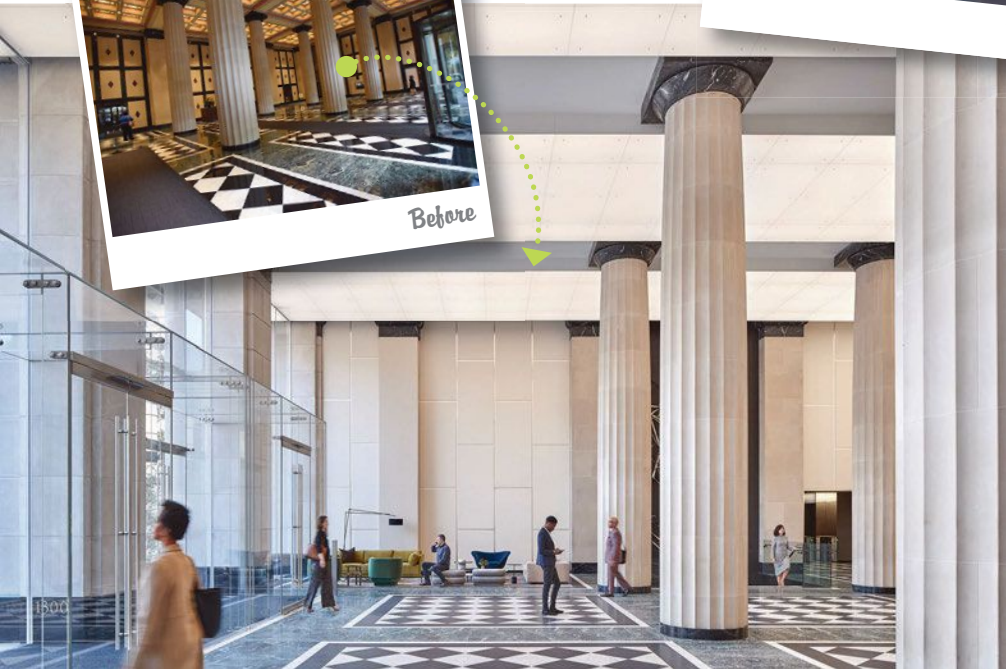
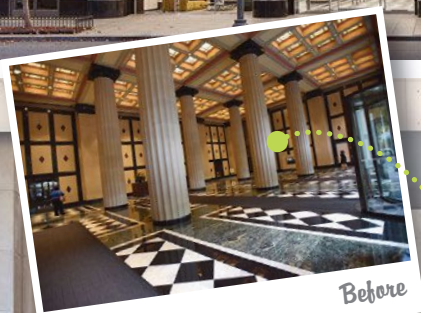
Apart from building tenants, members of the surrounding community have access to portions of the Franklin Square amenity spaces, such as the café, conference facilities and fitness center. As such, the lobby and amenities are designed for flexibility with reconfigurable

Salvaged slabs of original stone and marble are incorporated into the reclaimed lobby floor to maintain a consistent aesthetic respectful of the original design. Additionally, a great deal of Johnson's work is preserved behind the new finishes. The leather panels, for example, are installed on top of existing stone wall cladding so that if they are removed, the original work could be revealed. Early demonstrations, research and testing were therefore essential to verifying existing conditions prior to installing new design elements, helping uncover potential problems while they could still be remedied, and mitigating impact and damage to existing historical elements.

In a complex blend of old and new, Franklin Square's reinvigorated design accentuates its most elegant post-modernist features while providing tenants with a boutique office experience, unlike any other in the city. Delivered in October 2020, Franklin Square is adhering to safety guidelines and operating at limited capacity for the foreseeable future, ready to open its doors to the public and shine once more. 



PHOTOS: GARRETT ROWLAND



Retrofit Team

CLIENT/OWNER // Nuveen,
www.nuveen.com

**METAMORPHOSIS
AWARD WINNER!**

ARCHITECT/INTERIOR DESIGNER //
Hickok Cole, hickokcole.com

- Robert L. Holzbach, AIA, LEED AP, principal, director of Commercial Office
- Bertin Radifera, AIA, senior associate, project manager
- Andrew Bickell, AIA, LEED AP BD+C, associate, project architect
- Rhea Vaflor, IIDA, LEED AP ID+C, associate principal, director of Lifestyle

CONSTRUCTION MANAGER //
Hines, www.hines.com

GENERAL CONTRACTOR // Harvey
Cleary, www.harveycleary.com

STRUCTURAL ENGINEER //
Structura Inc.,
www.structura-inc.com

MEP ENGINEER // Greenman-
Pedersen Inc., <http://www.gpinet.com/>

CUSTOM LIGHTING DESIGNER //
GPI Design, gpidesign.com

ART CONSULTANT // Art. At Work.,
www.artatworkdc.com

Materials

CURTAINWALL GLASS // Kensington
Glass Arts Inc., kensingtonglass.com

CURTAINWALL SYSTEM // Waltek Co.
Ltd., <https://waltekltd.com>

**DESK, BENCHES AND LEATHER
PANELS //** Gaithersburg Architectural
Millwork, www.gcabinet.com

ELEVATOR-AREA TUBE LIGHTS // FLOS
Lukas, usa.flos.com

WOOD PANELS // Architectural Veneers
Intl., archveneers.com

CHANDELIERS // Marcel Wanders,
www.marcelwanders.com

PIERS AND CONCOURSE FLOOR //
Lorton Stone LLC, www.lortonstone.com

CARPET // Milliken, milliken.com

RUG // Jamie Stern,
jamiesterndesign.com



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Winner

DIGITAL ART GALLERY

An Oddly Proportioned Corridor Is Reimagined as a Constantly Changing Interactive Experience

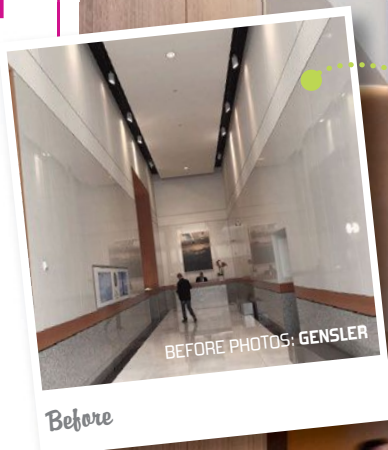
Located in San Francisco, the 88 Kearny Lobby is a renovated office building lobby transformed by a digital interactive experience. The original space was a 120-foot-long, oddly proportioned corridor that felt like an afterthought though it was the building's primary entrance. It was essential to the client to attract tenants in the active tech leasing market but not alienate more corporate tenants who traditionally occupied the building.

The solution was to turn its weakness into its strength and make the journey through the lobby a delightful, energizing and constantly new experience. The approach was to turn the corridor into a digital art gallery, which revealed itself only when viewed axially and walking directly through the lobby. From outside the building, you can see a dynamic image. As you enter the lobby, the image displayed on 25 23-foot LED screens fragments into strips and interacts with you as you pass it, then recomposes again as you enter the elevator lobby. Leaving the lobby provides a different experience that begins with the entire image, then seeing only fragments and finally seeing only metal panels softly illuminated by the then-invisible digital canvases.

The team designed and produced a library of bespoke digital content programmed to change and respond to lobby traffic with motion-sensitive technology. The real-time dynamic content maintains relevancy day to day, celebrating Bay Area culture, including events and holidays, natural scenery that shifts with the changing seasons and time of day, as well as ambient moments that showcase artistic process. Although much of the content is digitally generated, commissioned photography and time-lapse footage was also used to complete the multitude of unique thematic scenes. The content and architecture were developed together, creating a space that delights and responds to tenants. The design team's goal was that tenants and their guests would never experience the same walk twice. 

Judge's Comment

“I gave this a 5 out of 5. It's just a hallway, essentially, and now it's pretty darn cool.—Brett Baba, co-founder, Graham Baba Architects”



PHOTOS: JASON O'REAR



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Retrofit Team

ARCHITECT // Gensler, www.gensler.com/offices/san-francisco

- Doug Zucker, project leader
- Greg Gallimore, digital experience concept lead, project oversight
- Amy Campbell, architectural design director
- Dan Baroni, architectural project manager
- David Bradshaw, architectural project architect
- Sarah Frankel, digital experience production manager
- Jesus Garcia Galvez, lead technologist, hardware systems design
- Kaya Ono, digital experience media development and art direction
- Jacob Stephens, generative software developer
- Graeme Asher, reactive sensor system developer

GENERAL CONTRACTOR //

Principal Builders,
www.principalbuilders.com

SYSTEMS ENGINEERING AND INTEGRATION //

Diversified Systems Inc.,
www.diversifiedsystems.com

LIGHTING DESIGN // Banks
Landl, bankslandl.com

**ARCHITECTURAL FABRICS
(DIFFUSION)** // Archetype
Lighting, archetypelighting.com

DESK AND BENCH CREATION
// PAW Architectural Woodwork,

pawwoodwork.com

Materials

ENDGRAIN OAK // Kaswell
Flooring Systems, www.kaswell.com/end-grain

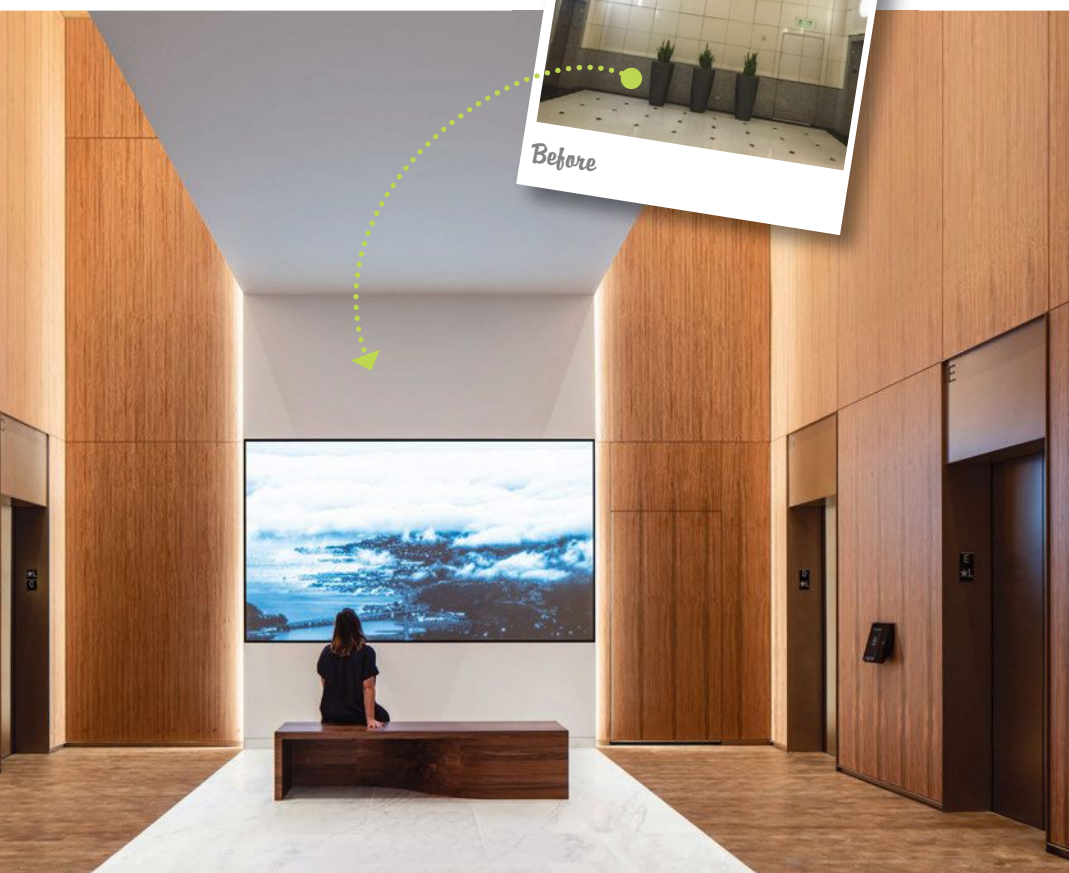
ARCHITECTURAL MESH // Kaynemaile Architectural Mesh,
www.kaynemaile.com

DIFFUSION MATERIAL // Barrisol, barrisolusa.com



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EBB AND FLOW

A Neighborhood Icon Retains Its Place in the Urban Fabric with a New Purpose

WRITTEN BY | NATHAN M. GILLETTE, AIA, LEED-AP O+M, CEM

Chicago's neighborhoods have historically been in a constant state of change. In the mid 1920s, the Logan Square area was home to many ethnic backgrounds, including a thriving Jewish community in need of a new place of worship. A congregation formed and commissioned Architect Edward Steinborn to create the stunning yellow brick and limestone structure that was to be the synagogue for the Temple Beth-El congregation for many years.

However, in what is the typical ebb and flow of Chicago cultural neighborhoods, the Jewish population in Logan Square after the Great Depression and World War II dwindled as its people moved to new neighborhoods or out of the city entirely. The neighborhood went into a period of decline and, by the late 1950s, the temple could no longer sustain a congregation and a new use was sought for the building.

As the demographics of the neighborhood changed, needs for community services also changed. It was in the late 1950s that the Boys Clubs of America (later the Logan Square Boys & Girls Clubs of America) took over as steward of the former synagogue for its second life as a children's social club in which kids would be taught skills and be kept off the streets. The Logan Square Boys & Girls Clubs of America remained in operation for the better part of 60 years until the neighborhood once again morphed, and community needs again changed.

In the early 2010s, club representatives realized that membership was declining as the neighborhood became a trendy place to live in Chicago. The club operated in the building until

2018 when it was moved to a new location and, once again, the future of the former synagogue was unclear.

In 2018, a trio of real-estate developers—Ranquist Development, Campbell Coyle Real Estate and New Era Chicago—got together with the architecture firm Pappageorge Haymes Partners to reimagine the building and its place in the neighborhood by creating the Grand Palmer Lodge, a multifamily residence. The developers had worked with each other on previous projects, and each brought a particular skillset needed for the project, including community outreach, acquisition and entitlement by the city of Chicago, and creating the best economic use for the building.

"When we started assessing the condition of the building in April 2018, it wasn't nearly in as bad of condition as we thought it might be," says Luke Marczewski, associate at Pappageorge Haymes Partners. "It was essentially a fully functioning building at the time, albeit underutilized due to the declining club membership. Although the original use of the building was a place of worship, after 60 years as the Boys & Girls Clubs, there wasn't much left of the interior fabric of the building that would indicate it was a synagogue. The exterior brick was in good condition and only required minor tuckpointing. The roof had been maintained and wasn't leaking into the building, so we got lucky that we got a solid building with few condition issues to start with."

CHALLENGES AROUND

The project went through a lengthy process of

Judge's Comment

“This was well-executed. Nice units and exterior spaces. The sense of history both inside and out is appreciated.— Brett Baba, co-founder, Graham Baba Architects



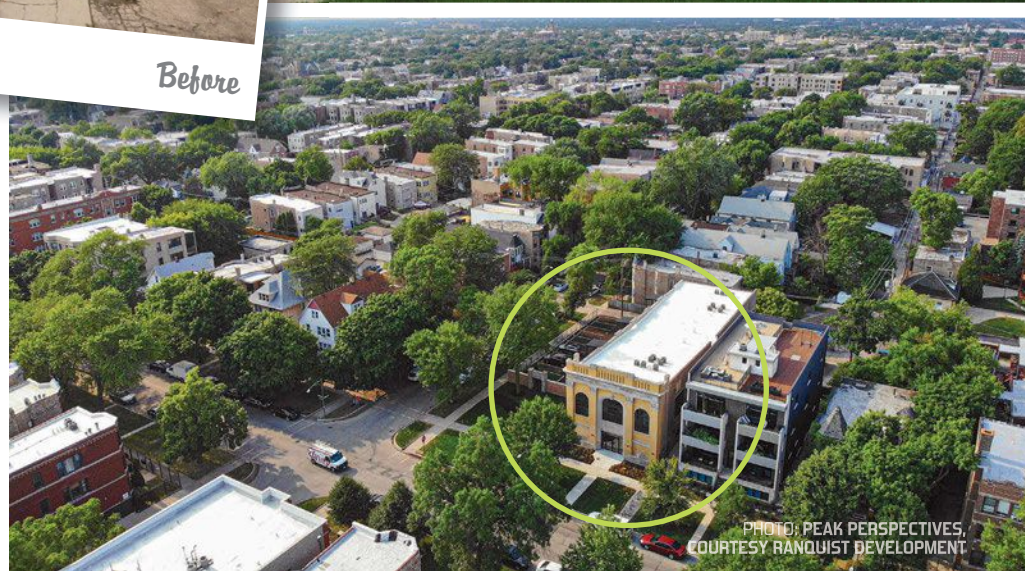
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PHOTO: ALEKS EVA PHOTOGRAPHY



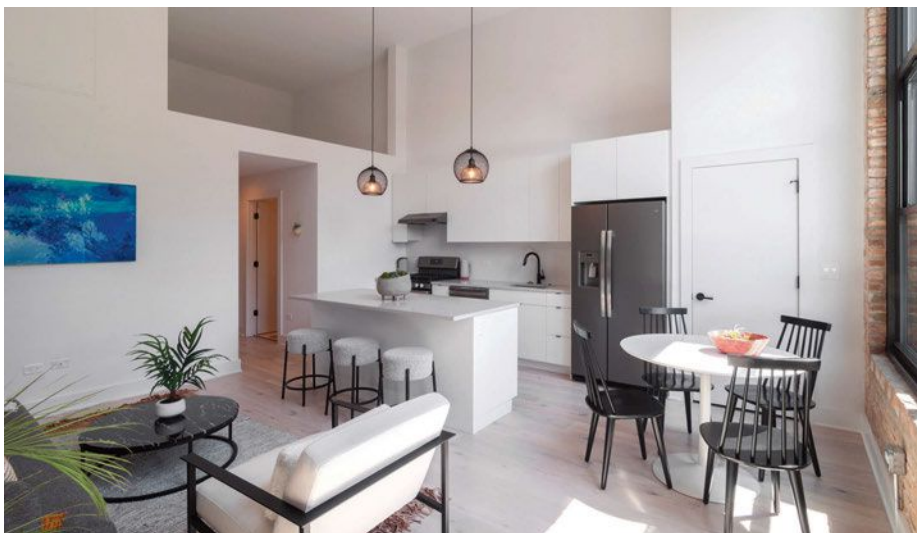
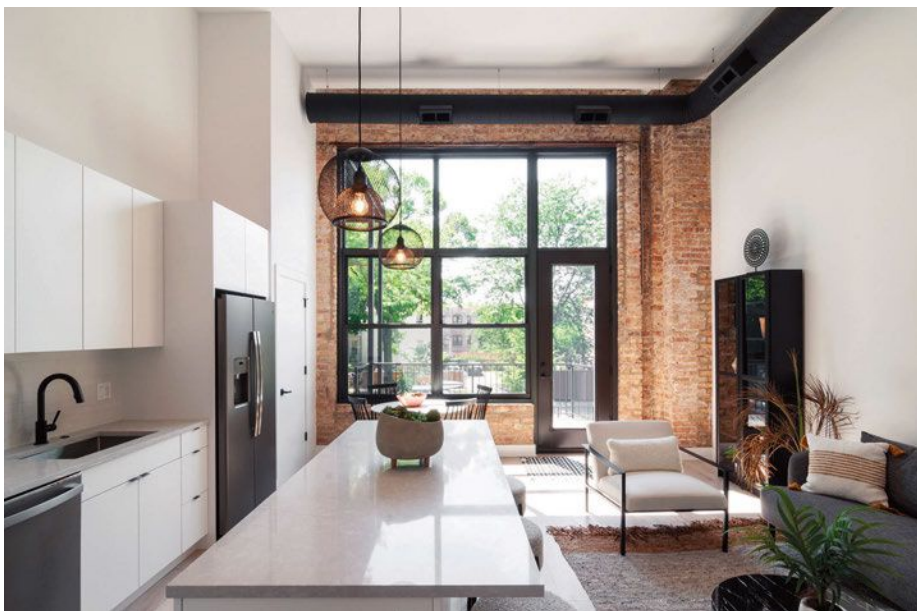
PHOTO: PEAK PERSPECTIVES, COURTESY RANQUIST DEVELOPMENT



An aerial view of the completed building and pocket park illustrates the site's relationship with the neighborhood.



PHOTOS: PAPPAGEORGE HAYMES PARTNERS unless otherwise noted



acquisition and entitlement with city offices and concurrent negotiations with various community groups that had an interest in seeing this neighborhood icon preserved rather than torn down. The local groups went as far as having the property down-zoned, which would severely limit future uses of the site should the building be torn down. Thankfully, the neighborhood preservation groups and the developers shared a common vision of reusing the existing structure. "Although the neighborhood organizations wanted to see the building preserved, everyone understood that the use of the building was going to change and they were not opposed to it. It was a real credit to the development team to work together with Logan Square Preservation to achieve a mutually acceptable result," Marczewski recalls.

Converting a 100-year-old, 2-story building into a new use is rarely easy and, according to Marczewski, the design team had several challenges to overcome. "One of the biggest issues that we had to contend with was the change in levels of the building," he says. "Historically the worship space was on the second floor, which had become a basketball court for the Boys & Girls Clubs due to the high ceilings. The lower level featured a sunken rec room which was another level change. There was no way we could create a typical double-loaded corridor down the center of the space. We had to get creative and move the units' entries to the exterior and create a shared exterior stair configuration."

In addition, not all of the building's elements were savable. The Annex, a 1950s-era addition on the side of the building, had to be demolished to accommodate the parking required for the project. "Although the Annex was ultimately removed, it was negotiated with Logan Square Preservation to retain some of the limestone trim elements of the building to create a border wall for a new pocket park to keep the feel of the former Annex," Marczewski explains.

The replacement windows were one of the biggest redevelopment costs for the project. Historic tax credits were not pursued by the developers, but it was always the design team's intention to be as respectful of the original structure as possible. "We worked very closely with the window manufacturer to match the historic style of the original windows and

The 14 dwelling units feature clean interior lines and modern stainless-steel appliances, as well as 14- to 15-foot-tall ceilings, large windows and exposed brick.

Retrofit Team

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ARCHITECT // Pappageorge

Haymes Partners,
www.pappageorgehaymes.com

■ Luke Marczewski, project architect

DEVELOPERS // Ranquist

Development, www.ranquist.com;
Campbell Coyle Real Estate,
www.campbellcoyle.com;
and New Era Chicago,
www.newerachicago.com

GENERAL CONTRACTOR //

MC Construction Group,
www.mcconstructiongroup.com

STRUCTURAL ENGINEER //

SP Engineers Ltd.,
www.spengineersltd.com

MEP ENGINEER // Diligent Design

Group (DDG), www.ddgengineers.com

CIVIL ENGINEER // Bono Consulting

Inc., www.bonoconsulting.com

INTERIOR DESIGNER // SK Design

Group LLC, www.s-k.is

Materials

BATHROOM FAUCETS // Trinsic from

Delta, www.deltafaucet.com

TOILET PAPER HOLDER/TOWEL

BAR/ROBE HOOK // Align from Moen,
www.moen.com

PORCELAIN BATHROOM SINKS //

Lenova, www.lenovagroup.com

TOILET // Entrada from Toto,

www.totousa.com

KITCHEN FAUCET // Solna from Brizo,

www.brizo.com/kitchen

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General Electric,
www.geappliances.com

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com/en-us, and Marvin,
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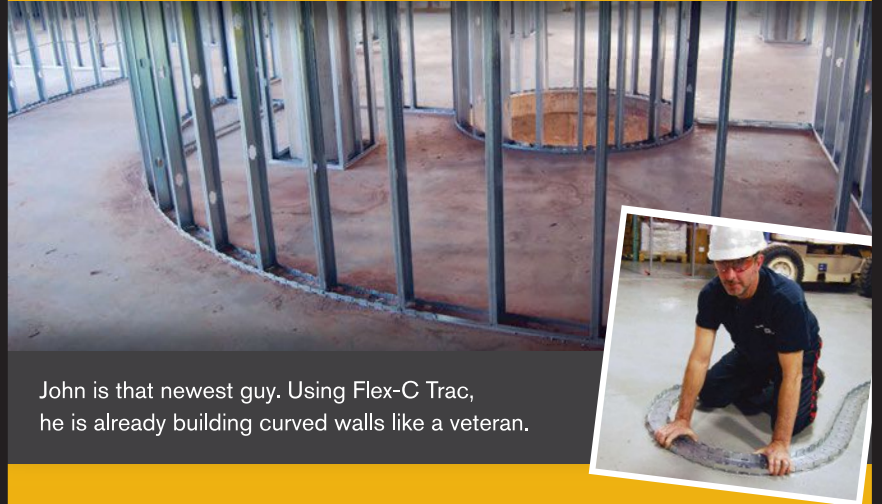
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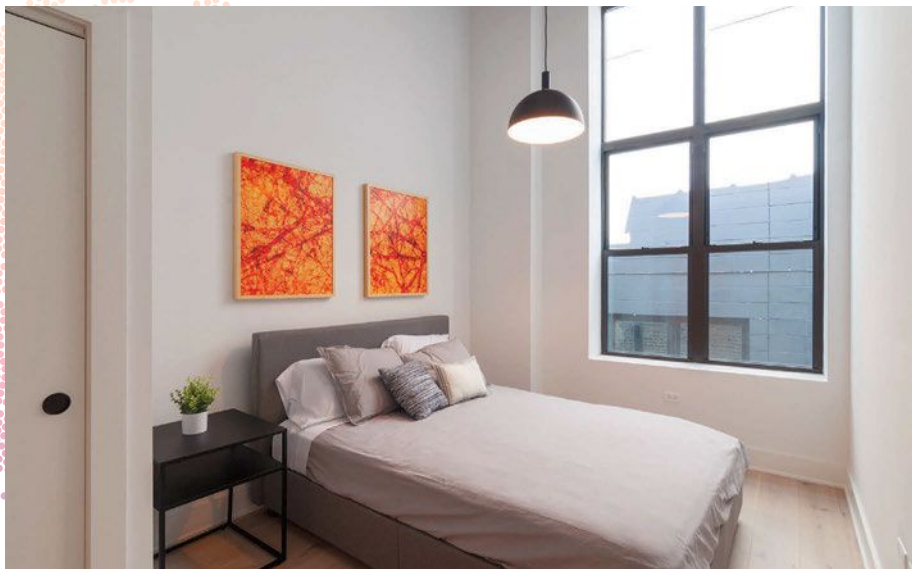
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provide an energy-efficient window that meets modern energy code,” Marczewski says.

A challenge that always presents itself in historic building rehabs is how to deal with heating and cooling while being respectful to the existing structure. The design team took advantage of the high ceilings in the existing space and created a mechanical platform above the units’ bathrooms. According to Marczewski: “The mechanical systems we specified are fairly typical forced-air split-system units that don’t take

up a lot of space. We were able to take advantage of the tall volume of space and hide the mechanicals above the typical 8-foot-tall bathroom ceiling.”

ABUNDANT REWARDS

Marczewski says one of the more rewarding aspects of the project was the challenge and push by the developers to create higher density to make the project more economically feasible. He explains: “The objective was to provide 14 dwelling units. It was a puzzle as an architect to create an efficient demising plan within the constraint of the existing four walls and roof.”

Ultimately the architects were able to configure the plan to include two one-bedroom units, 10 two-bedroom units and two three-bedroom units. To accomplish this, the design team looked to the exterior of the building to accommodate typical circulation spaces. “We needed all of the interior square footage we could get, so we pushed the typical circulation spaces to the exterior, and 12 of the 14 units have a shared stair and private terrace entry,” Marczewski remarks.

While the building exterior is true to its history, the interiors of the dwelling units are sleek and modern. With clean interior lines and modern stainless-steel appliances, the residences are perfect for what the market desired. The 14- to 15-foot-tall ceilings and large windows allow for ample daylight deep into the space. Exposed brick was left in areas to give a pleasing warm texture to the units’ interiors. Heating and cooling ductwork was painted a matte black to help it recede into the background. The project was completely leased only one-and-one-half months after construction.

The Grand Palmer Lodge is a shining example of many entities working together to create a common goal. The redevelopment of the former synagogue and community center was a win-win for neighborhood preservation groups, concerned citizens and developers alike. And an icon of the neighborhood was saved for another generation while creating an economically successful development and respecting the historic urban fabric of the Logan Square neighborhood. 



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Four Vacant Structures, Remnants of a 19th Century City Hospital, Are Reimagined as Modern Living Spaces

Retrofit Team

OWNER // Tegethoff Development, www.tegethoffdevelopment.com

ARCHITECT // Trivers, www.trivers.com

- Joel Fuoss, AIA
- Amy Gilbertson
- Amanda McAllister
- Martin Padilla
- John Wilhelm
- Riley Davis

GENERAL CONTRACTOR //

Raineri Construction, www.rainericonstruction.com

MEP DESIGN-ASSIST ENGINEER //

G&W Engineering, www.gandwengineering.com

STRUCTURAL ENGINEER //

KPFF Consulting Engineers, www.kpff.com

CIVIL ENGINEER // Civil Design Inc., www.civildesigninc.com

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Materials

HISTORIC ALUMINUM REPLACEMENT WINDOWS

// H500 Series from Quaker Windows & Doors, www.quakerwindows.com

ALUMINUM STOREFRONT //

Encore from Kawneer, www.kawneer.com

SLIDING DOORS //

Suspended System Sliding Door from The Sliding Door Co., www.slidingdoorco.com

The site of the Georgian was first home to the St. Louis City Hospital, built in 1845 and destroyed by fire. It was rebuilt only to be destroyed by a cyclone. The third and final reincarnation of the current complex was designed by Albert Groves and built in 1905. Although some portions have been lost throughout the years, much of the original fabric remains today. Other structures had been converted over the past decade, but four structures remained as a reminder to the fallen days of the historic site. At a site with a rich history and character, the completed design converts these four vacant structures into 74 new apartments.

The renovation of the remaining four vacant buildings took each unique building and emphasized the remaining historic character to tell the building's story while maintaining a continuity across the project. At its apex, the buildings in the complex were connected with a series of corridors and tunnels. Each building—The Service Building, The Clinic Building, The Garage Building and The Commissioner Building—presented its own unique challenges and characteristics. The approach was to honor the character of each building individually designed in the Georgian Revival theme expressed in brick with stone, wood and terra-cotta detailing.

THE SERVICE BUILDING, 1940

Once the hospital cafeteria, the generous windows flood every space with daylighting, which highlights the existing salvaged terrazzo, concrete beams and glazed tile block. The most unique space in the building resides in the single-story connector joining The Clinic Building with The Service Building. The connector possesses a large monitor that floods the space with daylighting and the basement below through the newly cut opening for access to the lower level, becoming a dynamic part of the building entry. The exterior south façade expresses the remnants of the ancillary building removed in the early 1970s. The design team at Trivers honored the history of the past

by leaving the scars intact and painting the exterior to complement the old and new.

THE CLINIC BUILDING, 1921

The Clinic Building was a part of the main hospital and has a dense column grid that challenged the unit layout. Units were designed in a manner that works around the structure to maximize the views of the city beyond with little remaining interior fabric remaining to restore.

THE GARAGE BUILDING, 1921

Previously used as the repair shop for hospital ambulances, the design of these spaces is more industrial with exposed masonry walls and ductwork. To maintain the overall openness, this structure houses the two largest units in the complex that highlight the existing exposed structure and reconstructed large monitor above. The entire wood roof decking was rebuilt upon the existing steel trusses, which were retained; exposing these trusses gives the space its openness.

THE COMMISSIONER BUILDING, 1907

The Commissioner Building held the offices for hospital administrators. The grand historic entry with original ornament were some of the few remaining and restored decorative elements that now provide a wonderful experience for residents as they walk through the building. This historic fabric gives the building a rich experience that is carried throughout the design with unit layouts that integrate perfectly with the massing for the original office function and the fenestration of the historic façade.

Because of the variety of buildings, structural systems and vantage points, each unit has a unique layout and offers distinct experiences. Within the units, the contemporary kitchens and bathrooms remain consistent, creating unity throughout the project. The layouts create a modern apartment experience with a classic and timeless finish palette to ensure these buildings continue to endure. 

Judge's Comment

“Nice job taking a group of dilapidated buildings and creating a nice residential development, as well as weaving the four buildings into a unified whole. Good consistency in detailing.”

— Howard Hirsch, AIA, LEED AP, founder and president, Hirsch MPG LLC

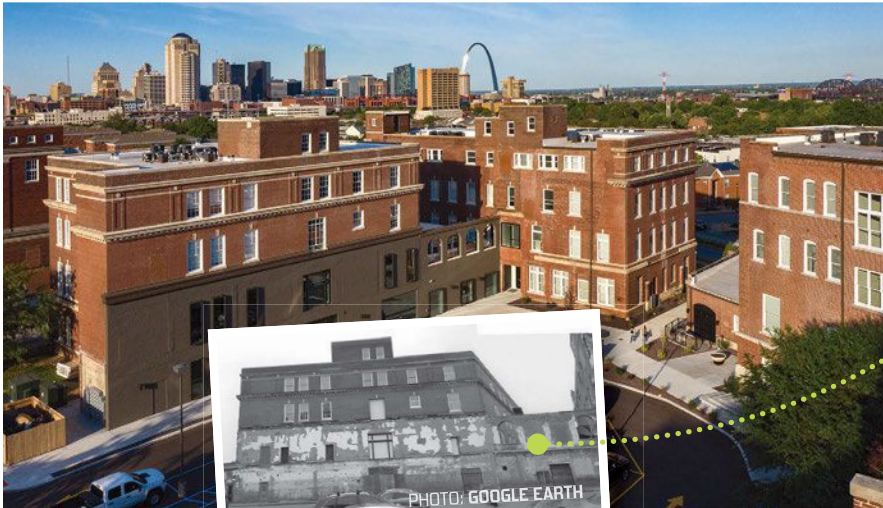


PHOTO: GOOGLE EARTH

Before



Because of the variety of buildings, structural systems and vantage points, each unit has a unique layout and offers distinct experiences.

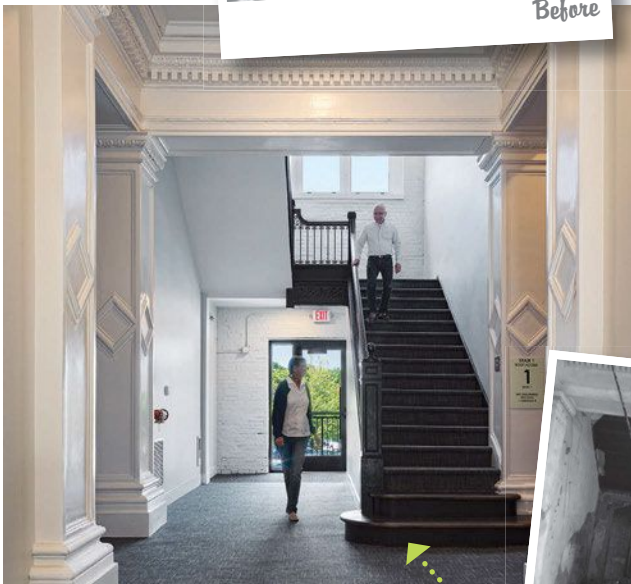
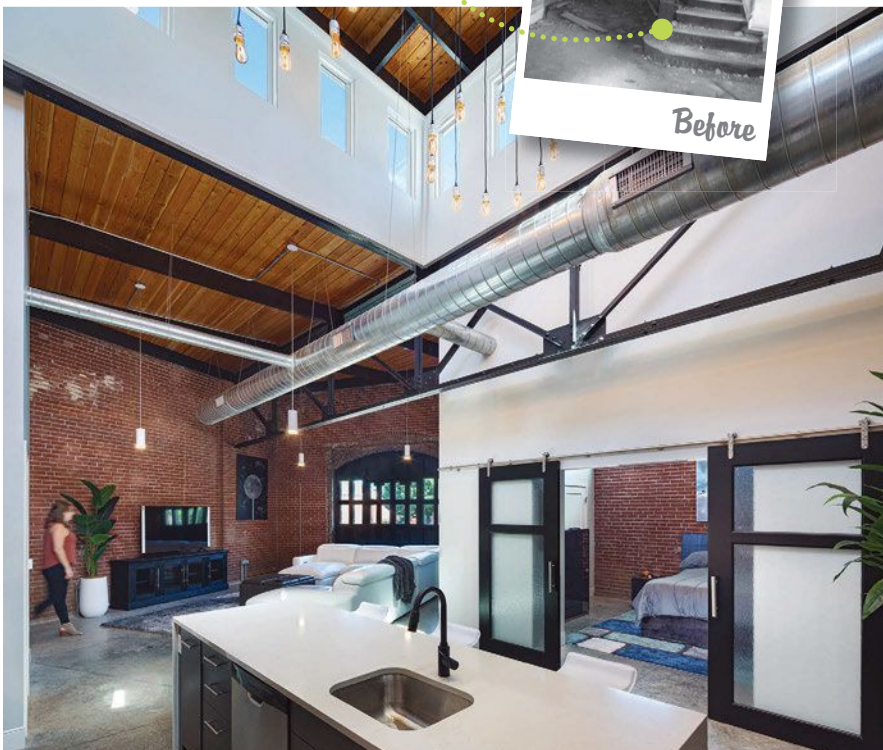
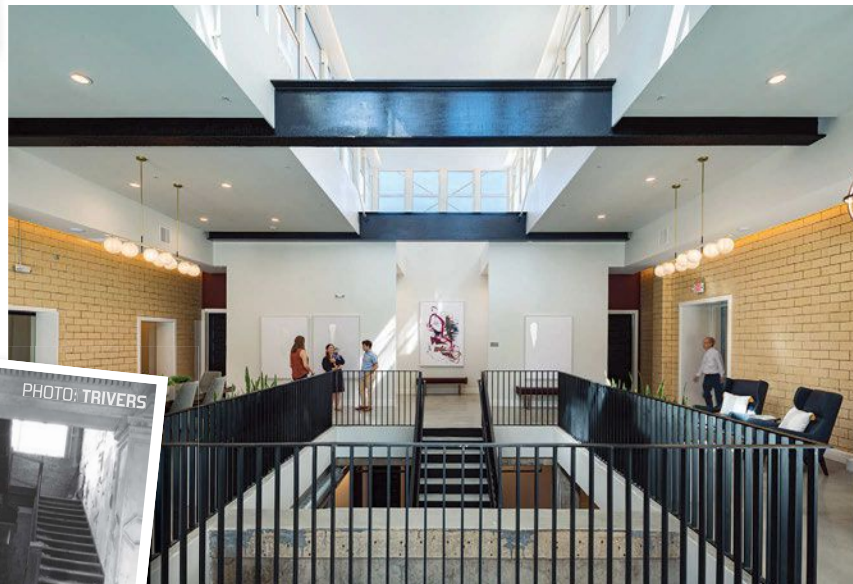


PHOTO: TRIVERS

Before



PHOTOS: SAM FENTRESS

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INTRICATE, ORNATE AND ECONOMICAL

A Comprehensive Façade Restoration Demonstrates Preserving Historic Fabric Is More Cost-effective than Large-scale Replacement

WRITTEN BY | CHARLES VAN WINCKLE

The Helmsley Building at 230 Park Avenue has been described by the New York City Landmarks Preservation Commission as “one of the most recognizable and most admired skyscrapers in New York.” It recently underwent a comprehensive façade restoration program, which included restoring the iconic 3-story columns at the 29th floor and 7-foot-tall terra-cotta bison heads.

Thornton Tomasetti’s Renewal team provided historic preservation and structural renewal services to RXR Realty, the building’s owner, for the project.

“RXR Realty’s portfolio includes many of New York City’s most iconic buildings and we are committed to preserving and revitalizing them,” says RXR Realty Senior Property Manager Gregory S. Brown. “Having been involved with many façade repair projects over the course of my long career in property management, I was both personally and professionally impressed with Thornton Tomasetti’s performance on such a large-scale exterior repair. The intricate and ornate nature of the architecture of 230 Park Avenue made it a very challenging task, but the team rose to meet that challenge very successfully.”

DISTINCTIVE TERRA COTTA

Completed in 1929, the 1.4 million-



Thornton Tomasetti restored the Helmsley Building’s crowning cupola at the top of the pyramidal roof.

square-foot Manhattan tower was the last major work of architects Warren and Wetmore in New York City. It is the skyscraping counterpart to Grand Central Terminal; it was designed by the same architects, for the same client and of the same materials. The 34-story building consists of a low-rise base and a slender tower capped by a pyramidal roof and cupola. It also features ornamentation by American sculptor Edward McCartan, such as its famed Park Avenue clock.

Distinct terra-cotta elements define the façade, including the 32 freestanding, Corinthian columns. At each column, there is a terra-cotta bracket at the 28th floor and a top bracket at the 32nd floor. The 16th-story cornice is populated by a herd of 74 7-foot-tall terra-cotta bison heads, symbolizing the westward extension of the railroad, along with additional iconographic ornamentation representing research, discovery and engineering progress.

The terra-cotta bison heads had cracked due to embedded steel corrosion expansion. Because of their size and intricate elements, it was not feasible to replace the heads, but the design team determined it could remove them intact and have them properly repaired. While not quite brain surgery, the repairs required removing the craniums of 36 of the bison

Judge’s Comment

“Very intricate and technical restoration that was beautifully done. The building looks like new. What a crazy amount of terra-cotta detailing to restore!”

—Howard Hirsch, AIA, LEED AP, founder and president, Hirsch MPG LLC



PHOTOS: ALEXANDER SEVERIN PHOTOGRAPHY, unless otherwise noted



PHOTO: BENJAMIN MAINTENANCE

During

The Helmsley Building's north façade includes its main entrance, vehicular portals with terra cotta coffers, statuary group and pedestrian walkways.

Retrofit Team

ARCHITECT AND ENGINEER // Thornton
Tomasetti, www.thorntontomasetti.com
PROJECT CLIENT/BUILDING OWNER //
RXR Realty, www.rxrrealty.com

GENERAL CONTRACTOR // Benjamin
Maintenance, www.benmaintenance.com

**CATHODIC PROTECTION ENGINEER,
MONITORING AND MANAGEMENT //**
C-Probe, www.c-probe.co.uk

HISTORIC PRESERVATION LIAISON //
Higgins Quasebarth & Partners LLC,
www.hqpreservation.com

**ROPE ACCESS RIGGER AND
CONTRACTOR //** STRUCTURAL,
www.structural.net

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figures, welding steel plates where needed, adding waterproofing, and resetting and repairing the original terra cotta.

TECHNOLOGICAL ADVANCES

A preconstruction survey found large-scale systemic cracking in the terra-cotta brackets that sit directly below the columns at the 28th floor and project 6 feet from the building's façade. Thornton Tomasetti used nondestructive evaluation techniques, including impact echo, ultrasonic pulse velocity and infrared scanning, to better understand the cause of the cracking. It then developed a finite element model, with data inputs from the preconstruction survey, to analyze the behavior of the cracks. The model revealed a high stress concentration that closely matched the observed diagonal cracking.

The team was then able to implement

appropriate, cost-effective repairs, including specially designed 6-foot-long stabilization anchors that relieved the stress concentration, which enabled the preservation of most of the historic terra cotta. Lost sections of terra cotta were recast directly on the building. This solution addressed the underlying cause of deterioration while significantly reducing the project schedule and overall cost.

The project team discovered heavy corrosion of the structural-steel lattice columns within the colossal terra-cotta enclosures and potentially throughout the structure, which was damaging the masonry cladding.

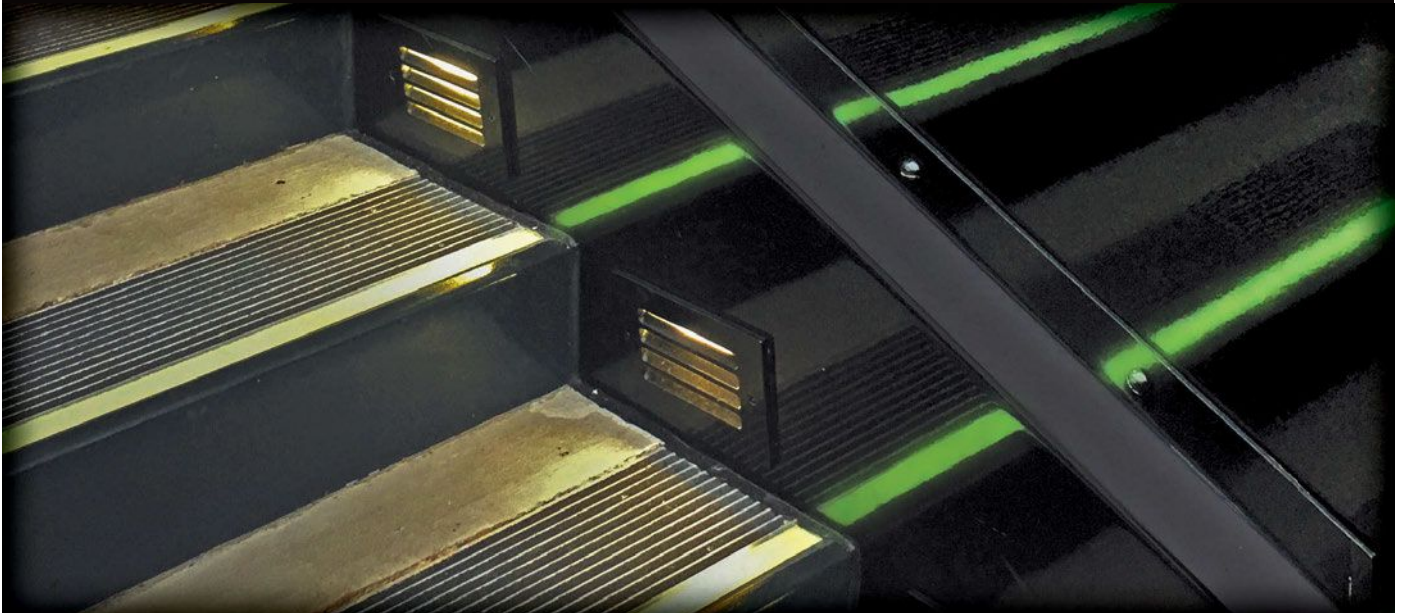
Because the columns were on the north elevation, directly above two major roadways, the project team decided to remove the bottom third of the terra cotta at these columns to access the steel for repairs. Repairs included



The 16th-story cornice is populated by a herd of 74 7-foot-tall terra-cotta bison heads, symbolizing the westward extension of the railroad. The terra-cotta bison heads had cracked due to embedded steel corrosion expansion.

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PHOTO: THORNTON TOMASETTI

During

welding plates in localized areas at the flanges and web of the built-up lattice steel column and at the lacing itself. A high-performance epoxy paint system was then installed on the steel, waterproofing added and augmented moisture management designed to weep the masonry of the column.

To address the steel corrosion, the team installed an impressed current cathodic protection (ICCP) system to arrest the corrosion. The cloud-based ICCP system imparts current into the steel to counteract the electrochemical process of corrosion and transmits monitoring data to the design team. This solution provided significant long-term cost savings over extensive masonry removal and replacement to access the steel.

A FOUNDATION IN BUILDING SCIENCE

Where the team was unable to salvage or repair the terra cotta, such as where the masonry cladding had been demolished to access the underlying steel at the columns, new terra cotta was produced. RXR Realty contracted to purchase new terra cotta early on in the design phase to accommodate the long lead time of the material. The intent was to get into the manufacturing queue as soon as possible, so when the restoration contractor

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was fully rigged, the new terra cotta would be arriving onsite.

Boston Valley Terra Cotta utilized laser scanning to fast-track the shop-drawing phase and a new hydraulic ram-pressing system, instead of the traditional hand-packing method, to accelerate the fabrication schedule. The faster extrusion process was not possible because of the classical column entasis. The color matching took several rounds of glazing samples to replicate the existing buff terra cotta, which was critical to blend into the remaining two-thirds of the column. This early planning helped to eliminate potential bottlenecks in the schedule and facilitated an early approval of the new terra cotta by the New York City Landmarks Preservation Commission.

Other major work included restoring the crowning cupola at the top of the pyramidal roof, as well as the Park Avenue arch portals. These two City Beautiful Movement features enhance the long vista down Park Avenue that carries vehicular traffic through the base of the building.

The project plan allowed for a significant number of structural-steel repairs without adversely impacting the aesthetic character of the historic masonry. This also provided comprehensive solutions to prevent future steel deterioration.

Systematic terra-cotta repairs included patching, pinning and coatings, as well as reinstallation. The team produced new terra cotta for portions of the colossal columns where the original material could not be preserved. Considerable effort was made to ensure that the new terra cotta matched the original shape, texture, color and glazing sheen.

This project, which was completed in

December 2020 and met RXR Realty's sustainability and preservation goals, sets a precedent for repairing terra cotta and embedded steel in terra cotta with a solid foundation in building science. In an era when it is more common to demolish historic terra cotta due to uncertain repair safety, the project demonstrates that preserving historic fabric is more economical than large-scale replacement. 

Materials

NEW TERRA COTTA // Boston Valley Terra Cotta, www.bostonvalley.com

IMPRESSED CURRENT CATHODIC PROTECTION SYSTEM // C-Probe, www.c-probe.co.uk

TERRA-COTTA, LIMESTONE AND GRANITE PATCHING MORTARS // Edison Coatings, www.edisoncoatings.com

EPOXY PAINT // Tnemec, www.tnemec.com

BRICK // Mutual Materials, www.mutualmaterials.com, and The Belden Brick Co., www.beldenbrick.com

GROUT-SOCK ANCHOR // Cintec, www.cintec.com

LIQUID WATERPROOFING // Sika, www.sika.com, and Kemper System, www.kemper-system.com

COPPER FLASHING // Hohmann & Barnard Inc., www.h-b.com

RUBBERIZED ASPHALT WATERPROOFING // GCP Applied Technologies, www.gcpat.com

SEALANT // Dow, www.dow.com



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POLISHED JEWEL

Once Threatened with Demolition, a Beaux-Arts Building Is Restored to Maintain the Historic Integrity of a Mixed-use Development

The Stephen Girard Building is an iconic 13-story, high-rise building located at the corner of 12th and Ludlow Streets in the Midtown Village section of Philadelphia. After the threat of demolition by a previous developer, the current developer chose to incorporate the building, which was designed by James H. Windrim and completed in 1896, into the fabric of the neighborhood and reveal its beautiful design elements with a modern interpretation and usage.

The building now stands as an integral part of the most recent phase of East Market, a 1 million-square-foot, mixed-use development project along Market Street in Philadelphia. Renovated, restored and redeveloped, the former office building now operates as a 236-key franchised hotel under the Canopy by Hilton flag, a hospitality brand that taps into the

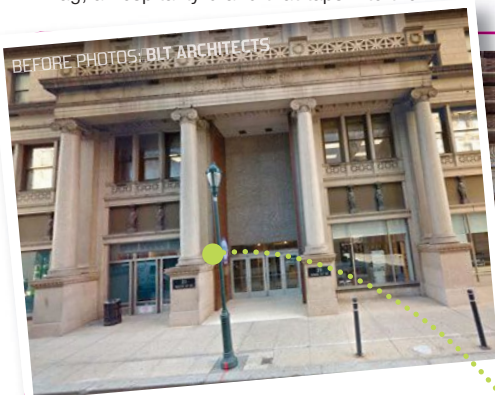
Judge's Comment

“This exterior restoration is nice—and nicely lit.”
—Josiah Stevenson, FAIA, LEED AP, principal,
Leers Weinzapfel Associates

growing experiential travel market by designing its guestrooms, amenities, services, and menus to resonate with local styles and flavors. The combination of the building's prime location, historical origins, and tailored branding drives the hotel performance and ongoing significance of this iconic building while contributing to the revitalization of East Market.

The exterior façade of the Stephen Girard Building had been greatly altered over the years. Nearly all Windrim's original windows at

grade were completely removed and replaced with high-sill projecting bays, and the original storefront openings were closed. Fortunately, two original window bays with egg and dart in cast bronze remained intact. These openings were preserved and then replicated by taking an exact cast of the original frame. While the new windows are very similar in form to the historic fabric, frameless glass storefronts and doors were included to create a more modern approach within each framed opening. In



Before



PHOTOS: JEFFREY TOTARO AND JULIE SOEFER



addition, existing transom windows were once again infilled with clear glass, and the interior decorative window trim was recreated to match the original millwork drawings found in the building.

The original 12th Street entry, Windrim's intended main entry to the building, was also greatly altered from its original state. However, the newly reconstructed entry is a near-replica of Windrim's original design. Using granite to match the original stone, frameless doors and rebuilding a long-demolished tympanum window create a discernible, simplified modern version of the original entry. By working closely with the Philadelphia Historic Commission, Pennsylvania State Historic Preservation Office, and the National Park Service, all new work on the exterior followed the appropriate preservation guidelines to transform and restore the Stephen Girard Building's exterior to its original glory.

The Stephen Girard Building promotes green design in Philadelphia. The building was LEED certified for its reuse of a historic structure, walkable location, efficiency in building systems, safe material selection and construction waste diversion. The pursuit of LEED certification promoted safer building practices and the reuse of existing fabric

wherever possible.

Furthermore, modern materials were used sensibly, and resources were reused when possible. For example, the cornice was restored with glass-fiber-reinforced concrete where needed, providing a lightweight and more cost-effective solution than using the original materials. A repurposed decorative iron guardrail is relocated to guard an exterior stair to the lower level. The exterior canopy, signage and lighting emulate the façade motifs while minimizing the impact to the existing masonry and historic fabric. The exterior entry canopy design repeats Windrim's Greek key detailing in a modern approach with backlit laser-cut aluminum. The canopy is structured so no new penetrations were required in the masonry; they are all contained within the proportions of existing window bays.

The Canopy by Hilton hotel, the center of the overall East Market development, provides an essential hospitality component to the existing multifamily, retail and office functions. By polishing Windrim's Beaux-Arts jewel, the Stephen Girard Building is once again positioned as an urbane, sophisticated, signature building within Philadelphia's long, rich architectural history. 



Before

Retrofit Team

OPERATOR // Davidson Hospitality Group, www.davidsonhotels.com

ARCHITECT // BLT Architects, www.blta.com

INTERIOR DESIGN // AvroKO, www.avroko.com

MEP ENGINEER // Concord Engineering, concord-engineering.com

CIVIL ENGINEER // Pennoni Associates Inc., www.pennoni.com

STRUCTURAL ENGINEER // The Harman Group Inc., www.harmangroup.com

CONSTRUCTION MANAGEMENT // Hunter Roberts Construction Group, www.hrcg.com

LIGHTING DESIGN // The Lighting Practice, www.thelightingpractice.com

LANDSCAPE ARCHITECT // Margie Ruddick Landscape, www.margieruddick.com

ACOUSTICS // Metropolitan Acoustics, metro-acoustics.com

Materials

EXTERIOR LED LIGHTING // Optic Arts by Luminii, www.luminii.com/brand/optic-arts

EXTERIOR SIGNAGE // Chandler Signs, www.chandler-signs.com

EXTERIOR DOORS & HARDWARE // Glazing Concepts LLC, glazingconceptsinc.com



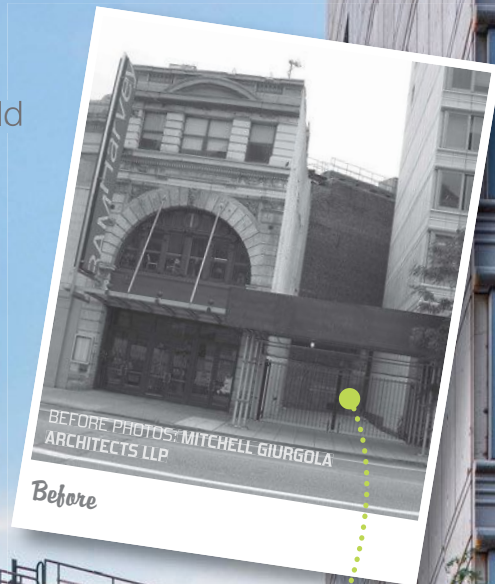
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BAM STRONG

The Brooklyn Academy of Music Refurbishes a 120-year-old Theater to Be More Inclusive of the Community It Serves



PHOTOS: ALBERT VECERKA/ESTO unless otherwise noted

The 120-year-old building that houses the Brooklyn Academy of Music (BAM) began as a burlesque house at the turn of the 20th century. As burlesque fell out of favor, the original 24,000-square-foot, 3-story building became a legitimate theater but soon was overshadowed by Broadway, so it fell into disrepair. The theater was revived in the 1950s and '60s as a movie theater.

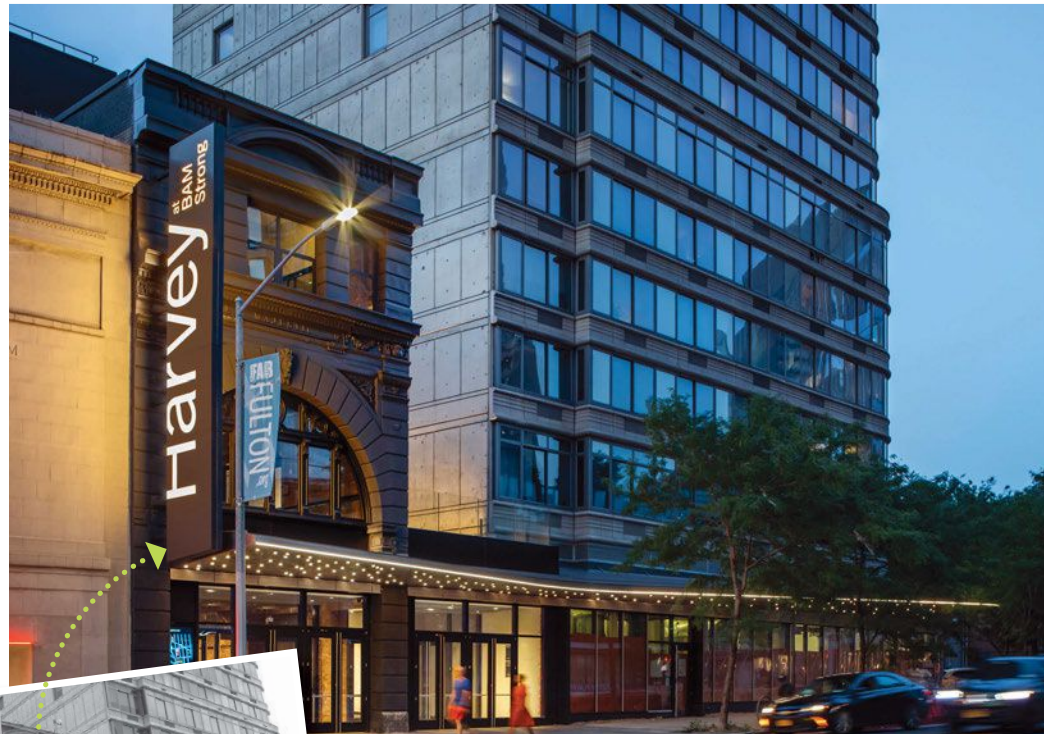
But, in the late '60s, Brooklyn's downtown experienced a mass exodus, leaving the theater vacant, too, for about 20 years. Then, in 1987, Brooklyn Academy of Music Founder Harvey Lichtenstein discovered this lost treasure. "The theater had been boarded up and, on a shoestring budget, the Brooklyn Academy of Music renovated the theater for one particular opera and that, all of a sudden, turned everything around," explains Paul Broches, FAIA, partner with Mitchell Giurgola Architects LLP and partner in charge of the theater's most recent renovation. "It still looked like the compelling wreck it had become after it had been abandoned, but everyone got excited about the theater and BAM put it to use again. Everyone fell in love with the theater's remarkable distressed character."

With a minimal budget to make changes, the architect in 1987 installed bench seating and changed the rake of the theater from a proscenium arch to a thrust theater, moving the stage forward of the proscenium arch, which created an intimate connection to the audience. "They did all of this by necessity for too little funding so, in the early 2000s, everyone knew the theater needed additional improvements and that's when Mitchell Giurgola came in," Broches recalls. "We began with a planning study to see what was wrong with the theater and what needed to be improved and how to do it without destroying the character of this much-loved performance hall."

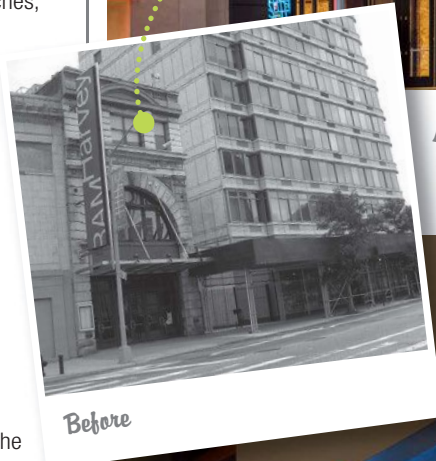
With little change to the building's footprint, the theater and its ancillary programs have more than doubled in size and has been renamed BAM Strong, incorporating what is now known as the Harvey Theater, named after Lichtenstein.

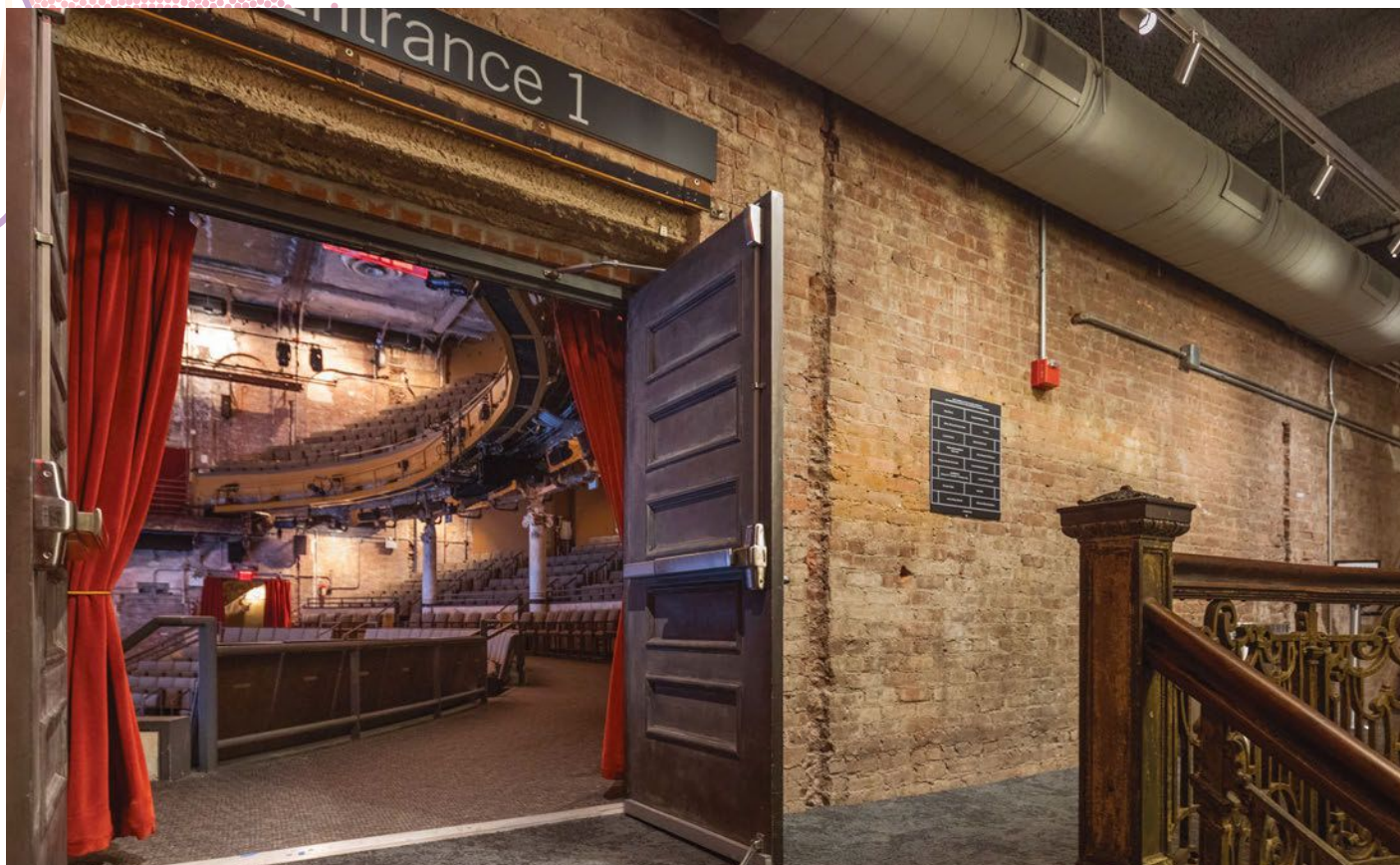
A CEREMONIAL EXPERIENCE

Among the first items to address when Broches and his design team at Mitchell Giurgola Architects began studying the building was its history of segregation.



An approximately 180-foot-long canopy brings a bit of Broadway to Brooklyn with sparkly lights that unify BAM's café, art gallery and theater.





Retrofit Team

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OWNER // Brooklyn Academy of Music,
www.bam.org

ARCHITECT // Mitchell Giurgola
Architects LLP, www.mitchellgiurgola.com

CONSTRUCTION TEAM //
Hunter-Roberts Construction Group,
www.hrcg.com

MEP ENGINEER // ICOR Consulting
Engineers, www.icorassociates.com

STRUCTURAL ENGINEER //
Silman, www.silman.com

CIVIL ENGINEER // Langan,
www.langan.com

THEATER/AUDIOVISUAL //
Auerbach Pollock Friedlander,
www.auerbachconsultants.com

ACOUSTICS // Akustiks, akustiks.com

RESTORATION // Superstructures
Engineers + Architects,
www.superstructures.com

CODE/EXPEDITOR // Milrose
Consultants, www.milrose.com

LIGHTING DESIGN // George Sexton
Associates, www.gsadc.com

VERTICAL TRANSPORTATION //
VDA, vdassoc.com



PHOTO: ELLIOTT KAUFMAN

Patrons had fallen in love with the distressed appearance of the theater, so Mitchell Giurgola Architects was challenged to maintain the beloved appearance while updating the theater for the 21st century.

"When the building was built, it had two different stairs to get into theater. One stair would lead patrons through a lobby and into the elite orchestra seating. The less wealthy had to enter through a long stairway off the sidewalk, bypassing the lobby and traversing up four flights of stairs to the upper balcony," Broches explains. "We were faced with this issue, which had no sense of equity and also provided no access for the disabled."

One of the design team's challenges was to develop a ceremonial stair for everyone. Additionally, an elevator was needed to reach all four levels.

"One of BAM's board members at every meeting would say, 'We need to improve the user experience for everyone. We want our guests to feel great the minute they walk through the door and to be filled with anticipation!'" That was really a driving force for the ceremonial stair," Broches says.

After much consideration, the design team opted to transform a small leftover patch of ground behind the building into the new stair.

"It was not really clear why that small space was there. In the end, we decided it was probably a result of three different properties coming together and making an odd-shaped void," Broches asserts. "We eventually came up with the concept for the stair that would rise through a kind of sleeve. Climbing the stair became a wonderful opportunity to transform the experience of being at the theater."

In addition to the new ceremonial stair, the redesigned lobby also transforms theatergoers' experience. Mitchell Giurgola Architects' team utilized a 20-foot-wide vacant lot owned by the theater next to the existing lobby to double the lobby's size and integrate an art gallery into the additional space. Above the art gallery, a sculpture terrace provides another place in which guests can mingle and enjoy art.

"BAM has a number of venues and wants to have an art program in all of them," Broches explains. "For each of them, they will commission an art project and, if possible, have a gallery space that can be used for changing exhibitions. Currently there's a project to install a commissioned artwork on the newly created sculpture terrace. BAM is a continually evolving institution, which is what makes it exciting."

Once the ceremonial stair, expanded lobby and artwork improved the visitor experience, the design team knew the Harvey Theater's seating also had to be upgraded. Broches notes: "We changed the rake of the seating to better the sightlines and we increased the row-to-row spacing between the seats. The earlier spacing left inadequate leg room. Moving in front of other patrons was

challenging. Changing the row-to-row spacing is quite a technically challenging undertaking but together with the specification of new upholstered seats we were able to improve comfort, make it code-compliant and improve sightlines." The theater consultants on the project played an important role in accomplishing these transformative changes.

The team also introduced vomitories at the lower orchestra level so people could enter the orchestra seats from the main lobby. "That helped to distribute the number of theatergoers so they could move in and out of the theater more comfortably and also in a code-compliant way," Broches says. Despite all the changes to seating, the design team was able to maintain the 850 seats that had been in the theater when the project began.

To bring the Harvey Theater into the 21st century, Mitchell Giurgola Architects introduced 3D cinema and surround sound. The challenge, however, was maintaining the beloved distressed appearance. "We wanted to keep the peeling paint, going back generations to the early 1900s, while installing very contemporary theater technology," Broches says. "There was never the expectation for a natural acoustic hall, but there was the challenge of 3D cinema, where surround sound is critical, so the whole room behaves like a sound chamber."

Broches says BAM performs a lot of spoken-voice and musical theater. In each case, different acoustical requirements are needed related to amplification. "We introduced a new amplification system so when you have just voice, you want the room to be pretty lively, and when you have a lot of music, the room can be a little quieter. We introduced sound baffles all around the back walls that are drawn up almost like a window shade, so we could change the acoustic values in the space by moving those baffles up and down—again, without altering the appearance of the hall."

CHALLENGES AND OPPORTUNITIES

As the team began working on its design solutions, it only had the drawings from the 1987 architect on which to rely. Although that architect had uncovered most of the existing building's problems, not discovered was a basement beneath the ground-floor lobby. "It was only after we had been working on the project for quite a while we discovered a void below the first-floor slab," Broches recalls. "It turned out this basement was not properly supported, so, when the project was pretty far along, we had to go back down into that void space and figure out how to support the floor above it more adequately."

The void space is only 5-feet high, so it

Materials

FLUID-APPLIED ROOFING // Siplast, www.siplast.com

DECORATIVE CONCRETE TREADS // Get Real Surfaces, www.getrealsurfaces.com

CURTAINWALL // Kawneer, www.kawneer.com

CUSTOM REPLACEMENT WOOD WINDOWS

// Seaboard Weatherproofing & Restoration, www.seaboardwpr.com

INTERIOR GLASS PARTITION // Technical Glass Products, technicalglass.com

CARPET TILE // Custom Color and Pattern and Urban Retreat by Interface, www.interface.com

CERAMIC TILE // Modern Dimensions by Daltile, www.daltile.com

PORCELAIN TILE // Crossville Inc., www.crossvilleinc.com

ACOUSTIC CEILING TILE // LYRA High CAC and Ultima Health Zone by Armstrong Ceiling & Wall Solutions, www.armstrongceilings.com

ACOUSTICAL PLASTER // Acoustement 40 by Pyrok, www.acoustement.com

ACOUSTICAL BANNER // Acouroll from Texas Scenic Co., acoustacorp.texasscenic.com/acouroll

CUSTOM PERFORATED METAL SLAT

CEILINGS // Gordon Architectural + Engineered Solutions, www.gordon-inc.com

SOLID SURFACE // Caesarstone, www.caesarstoneus.com, and Corian, www.corian.com

ORNAMENTAL GLASS RAIL // CRL shoe with 1 1/16-inch-thick glass assembly from C.R. Laurence Co. Inc., www.crlaurence.com

ORNAMENTAL STAIR // M Cohen and Sons, mcohenandsons.com

THEATRICAL LIGHTING CONTROLS // ETC, www.etcconnect.com

CURTAIN // Rose Brand, www.rosebrand.com

VARIABLE FREQUENCY DRIVES // ABB, new.abb.com

FIREPROOFING // CAFCO 400 from ISOLATEK, www.isolatek.com

FIREPROOFING INTUMESCENT // AD FireFilm from Carboline, www.carboline.com

ELEVATOR CAB // United Cabs, www.elevatordesigns.com

LIGHTED HANDRAIL // Intense Lighting by Leviton, www.intenselighting.com

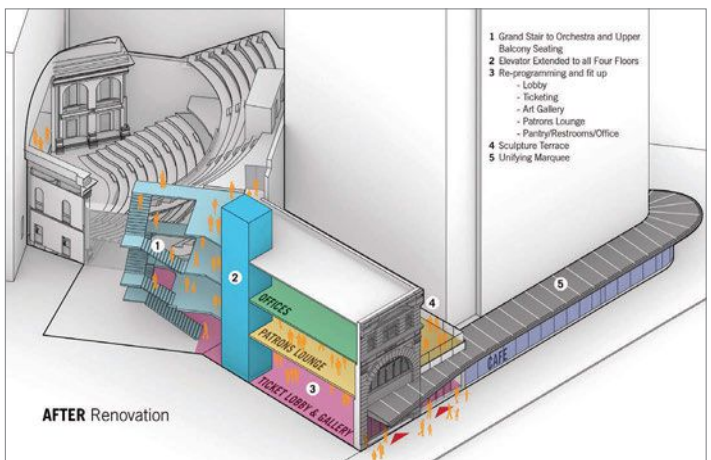
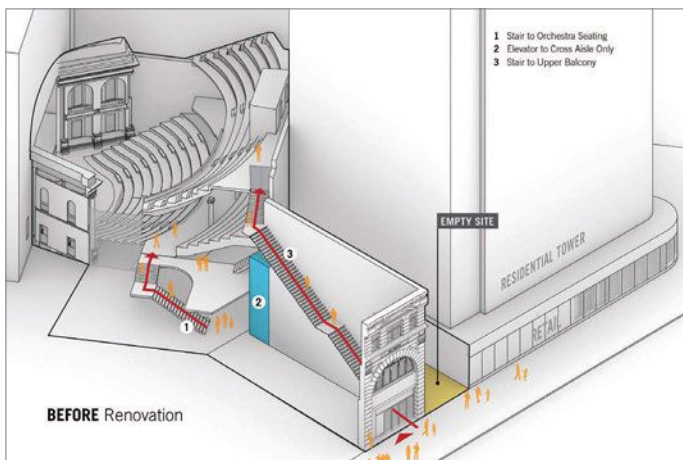
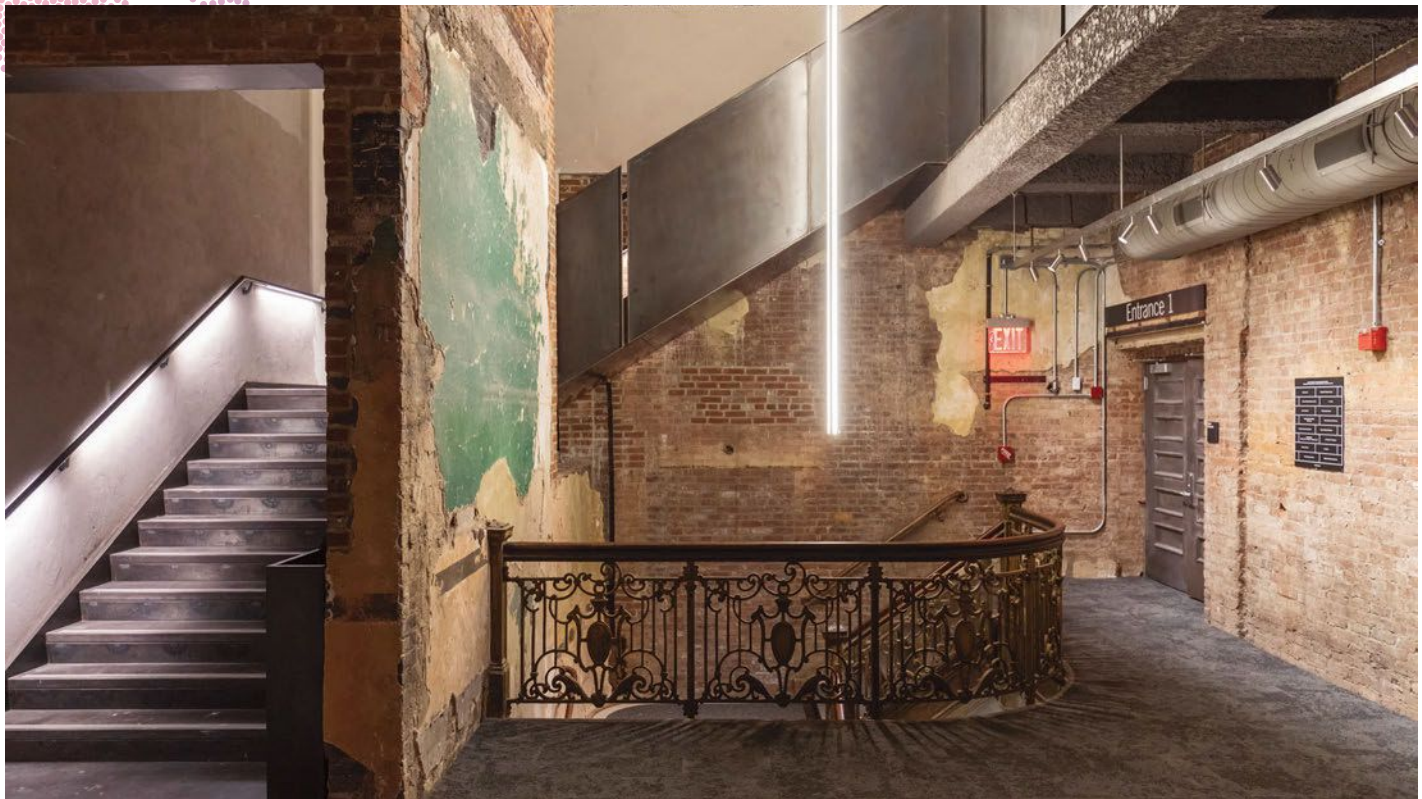
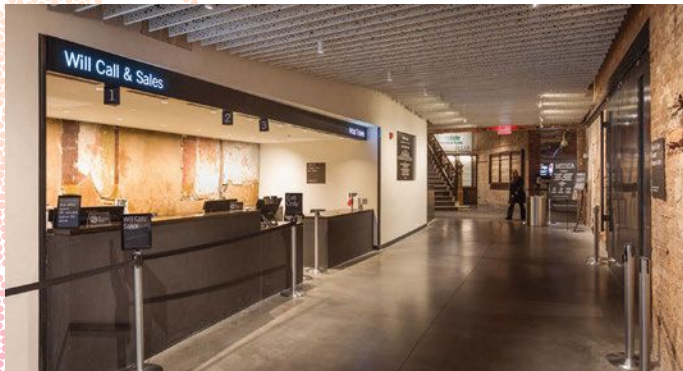
ROOFTOP AIR CONDITIONERS // Trane, www.trane.com

SPLIT AIR-CONDITIONING UNITS // Trane/Mitsubishi Electric P Series, bit.ly/3k6y1z0

BUILDING AUTOMATION // ABM Systems, www.abmsys.com

EXTERIOR WATERPROOF COATING // Prosoco BMC II, prosoco.com/product/bmc-ii-deep-base

EXTERIOR PAINT // Raccoon Fur from Benjamin Moore, www.benjaminmoore.com



Mitchell Giurgola Architects expanded the lobby and ticketing area (above left) and integrated an art gallery (above right). Formerly segregated with two entrances, the theater now features a grand stairway for everyone within a small patch of leftover space behind the building. The drawings illustrate the monumental changes made within a small space.

“ [The confidently modern design elements and functional improvements are elegantly yet strikingly juxtaposed with the historic fabric and patina, creating an uplifting contemporary experience for visitors and users. —*Marcy Wong, partner, Marcy Wong Donn Logan Architects* ”

is not being used. However, a trap door was created in the ticket space to allow access.

In addition, there had been a party wall between the theater building and the vacant lot next door, which became the expanded lobby/art gallery. Broches notes: “We knew there had been another building in that lot, probably a row house because the lot was only 20-feet wide. The party wall had five wythes of brick and was not as stable as we would’ve liked so that had to be reinforced.”

The exterior of the building had an iconic appearance with its arched window and supposed stone façade, so Mitchell Giurgola Architects’ team intended to fully restore it. However, while doing probes and studying the surfaces, the team discovered the façade had not been built as expected. “What looked like a stone façade was actually totally false,” Broches reveals. “It was cement plaster that was made to look like stone and the cornices were—we don’t really know what they were originally—but over time they had been replaced with cobbled-together wood and sheet metal, and yet it still all looked terrific from a distance.”

The team removed and replaced pieces of the building that could not be saved or had previously been restored poorly. Because the building was not a landmark, it didn’t have to be meticulously restored; however, the team still wanted to maintain its iconic look. “The fake stonework and plasterwork were in poor condition and the budget was rather limited for what we could do, so BAM was on board to install a waterproof coating over the entire exposed façade along the street front and the sidewall over the sculpture terrace,” Broches says. “We decided we should not try to simulate the colors that were there before because that would be a false enterprise; instead, we picked a color together with the client, and a charcoal color was the outcome.”

The waterproof coating protects the façade properly for the first time in many years, a key to the building’s durability and sustainability. The restoration of the exterior envelope necessitated the involvement of an expert restoration consultant and experienced masonry contractors. Meanwhile, Broches believes the charcoal color gives the building a stronger presence and unifies the exterior unlike the varied colors of the original. “The charcoal also reflects the light nicely; at night,

the building looks a bit mysterious and has a theatrical presence,” he says.

The team replaced the original wood windows with new custom wood windows that resemble the originals. As with the masonry work, the replacement windows meet current energy requirements.

Finding space for vertical shafts—for a new elevator that now can be used by all patrons and new air-conditioning ducts—was extremely challenging because the team had to avoid interfering with much-needed programming spaces. “The site is tiny, but the program is really demanding,” Broches points out. “The client didn’t want to give up any space or lose programmed activities but also recognized the need for a proper mechanical system. We overlaid the floor plans on one another to find a continuous vertical shaft through all floors with the least loss of usable floor area. That was a big challenge, very common with older buildings.”

Key players in this effort were the mechanical engineering and structural consultants who had the patience and skill to explore and evaluate options. Ultimately, a location was found with landings adjacent to the stair landings.

Mitchell Giurgola Architects was able to bring the sparkle of Broadway to Brooklyn when the design team learned BAM had purchased the first-floor retail space of the condominium building next to the vacant lot that became the expanded lobby/art gallery. The retail space has been conceived as a café. “BAM wanted to bring the theater to the street, welcoming all to have some interaction with it,” Broches explains. “That was really the genesis of the canopy that wraps around the entire project and onto the side street. The canopy is about 180-feet long and its purpose is a little bit like the Broadway marquees that are so exciting. We wanted to bring some of that to Brooklyn. The marquee features sparkly lights above and below in the sidewalk. It unifies the café, art gallery and theater. When people walk down the street, they experience BAM as almost a block long, not three smaller properties.”

Unfortunately, because of COVID, BAM currently isn’t utilizing the café space. The pandemic also has had a negative impact on the theater itself, which opened after Mitchell Giurgola Architects’ renovation in October 2019. “The theater shut down when New York shut down in early March 2020,” Broches

recalls. “They now are planning to reopen this winter, so there will have been a long hiatus.”

A TRUSTING CLIENT

The Brooklyn Academy of Music enjoys national recognition, but it’s also very much a community theater that relates very strongly to its Brooklyn roots. The theater’s neighborhood has become a cultural district, which includes other performance venues, like the Theatre for a New Audience and BRIC.

“The comeback and evolution of the neighborhood since the late 1960s and BAM’s role in promoting it and reflecting the different values of its constituencies has been extremely important,” Broches says. “I also think that BAM’s engagement with community has been an important factor in the design. The theater experience is not just about passing through a set of doors to an inner sanctum performance space. The experience extends out onto the street. The wider lobby, art gallery, eventual café, sculpture terrace—which is visible from the street—are all ways in which the theater can reach out and embrace all members of the community. That is part of BAM’s mission that the project seeks to promote.”

Broches notes he has been fortunate to work on a number of projects in his career that have been particularly exciting in terms of the design challenges and rewarding because of the interaction and relationship with the client. BAM is one of them. “I am convinced that successful civic architecture is most likely to happen with a ready client,” he says. “The ready client is enlightened and open to innovation, often not really expecting it, and sees the process not as a burden, but as an opportunity for invention and excellence. BAM is definitely that kind of client. For me, working so closely with them and having their trust to do our best are the things that make me and my partners and colleagues at Mitchell Giurgola most excited about practicing architecture.” 



RETROFIT MAGAZINE
**METAMORPHOSIS
AWARDS**

Winner

GOOD FOR BUSINESS

A Former Big Box Center Is Transformed for Residential Lending Operations

Northpointe Bank, a nationwide provider of innovative and high-value banking products, has been experiencing continued growth in its residential lending offerings. This growth drove demand for a new kind of space, which would assume the role of the national operations hub for Northpointe Bank's growing lending and servicing groups. Together, the team master-planned an expansive transformation to the former Cascade Commons building, an aging, nearly vacant, 91,000-square-foot big box and design showcase center in Grand Rapids, Mich.

Prior to putting pen to paper, the Ghafari Associates team developed a strategic roadmap to better understand Northpointe Bank's key business drivers that would have a direct impact on the functionality of a workplace and the effectiveness of the people working within. This roadmap offered a holistic understanding of Northpointe Bank's real estate, people, culture, technology and wellbeing. With this in mind, the design team designed an immersive interior and exterior experience that balances diverse workstyles and high-tech meeting spaces with engaging and expansive social spaces. The environment offers serious focus balanced with fun, meant to be reflective of users' daily lives and surroundings.

Key to the design's success is the introduction of vast amounts of natural light,

coupled with a design vision that mimics Michigan's natural beauty and seasonal change. Michigan-inspired wall graphics, colors, and material choices are scattered throughout the building to evoke the adventurous spirit of Michigan and all the different seasonal landscapes it offers. A massive interior skylight spans the entire depth of the building, not only as a vital feature within the building but also symbolic of Northpointe Bank's future.

In addition to early strategic thinking, a key that made the project a success was the early introduction of the general contractor, Visser Brothers Construction, who also was the contractor for the original Cascade Commons facility. Visser Brothers Construction offered a wealth of history and knowledge of the original building's design and construction methods.

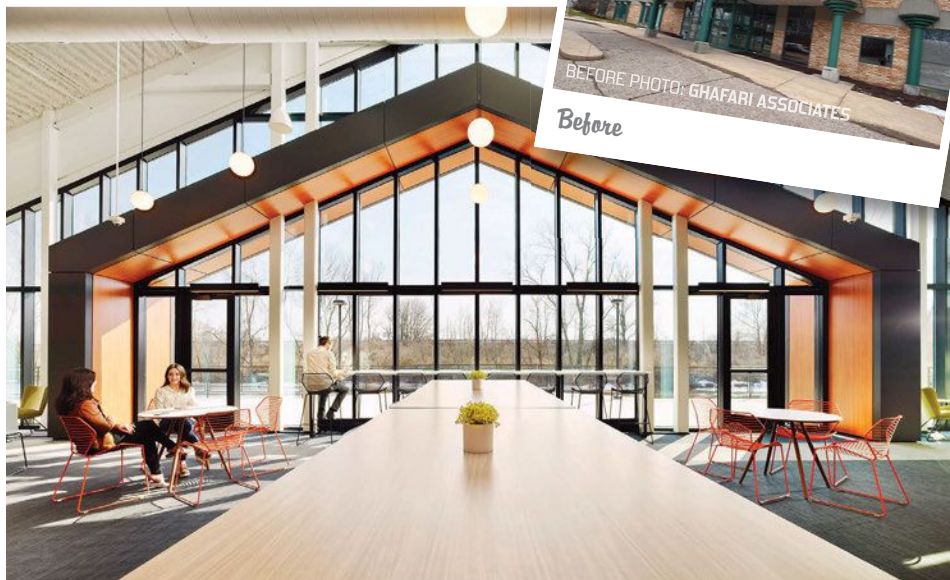
Northpointe Bank Operations Center is a stunning, flexible, and creative transformation that anticipates the needs of a growing company while accommodating a variety of groups, departments and workstyles. As a dynamic and forward-thinking workplace, this facility continues to elevate Northpointe Bank's mission "to be the best bank in America by bringing value and innovation to the people and communities they serve while delivering real value through a collaborative, high-performance and diverse company culture." 

Judge's Comment

“Kudos to the architects and their client, a bank who collaborated with the designers to create a wonderfully natural-light-filled, flexible and inviting workplace for employees. Justly, the inviting interior and exterior environments will prove to be not just good for people, but also good for business.—Marcy Wong, partner, Marcy Wong Donn Logan Architects”



PHOTOS: JJ JETEL PHOTOGRAPHY



Northpointe Bank Operations Center is a national hub for Northpointe Bank's growing lending and servicing groups. The retrofitted space not only symbolizes the work being done within, but also anticipates the needs of a growing company while accommodating a variety of groups, departments and workstyles.



Retrofit Team

METAMORPHOSIS
AWARD WINNER!

DESIGNER AND ELECTRICAL, MECHANICAL AND STRUCTURAL ENGINEER //

Ghafari Associates LLC, www.ghafari.com

- Michael Lubbers, director of design
- Matt Christie, AIA, senior designer
- Adam Nelson, project manager
- Evan Hansel, designer
- Deanna Klopchic, interior designer
- Greg Enos, manager, electrical engineering
- Scott Bernth, manager, mechanical engineering
- Jeffrey Mitchell, assistant manager, structural engineering

GENERAL CONTRACTOR //

Visser Brothers Construction,
www.visserbrothers.com

ACOUSTIC CONSULTANT //

Soundscape Engineering LLC,
soundscapeengineering.com

Materials

CARPET TILE // Milliken, milliken.com

LUXURY VINYL TILE // To Market,
www.tomkt.com

WOVEN FLOOR MAT // Chillewich,
www.chillewich.com

PORCELAIN TILE // Caesar, www.caesar.it,
and Ergon, www.emilgroup.com

LAMINATE // Wilsonart, www.wilsonart.com

SOLID SURFACE // Silestone,
www.silestoneusa.com

QUARTZ COUNTERTOP // Corian,
www.corian.com

CERAMIC WALL TILE // Crossville,
www.crossvilleinc.com

WALLCOVERING // Rebel Walls,
rebelwalls.com, and Murals Wallpaper,
www.hovia.com

PAINT // Sherwin-Williams,
www.sherwin-williams.com

ACOUSTICAL BAFFLES // TURF,
turf.design

ACOUSTICAL PANELS // MDC Interior
Solutions, www.mdcwall.com

**FABRIC ACOUSTICAL PANEL
/WALLCOVERING //** Wolf Gordon,
www.wolfgordon.com

UPHOLSTERY // Designtex,
www.designtex.com

COFFEE PANTRY BANQUETTE BACK //
Carnegie, carnegiefabrics.com



RETROFIT MAGAZINE
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AWARDS**

Winner

VISUAL DIALOGUE

Tammany Hall Receives a Rooftop Expansion that Honors Its Namesake, the Lenape Chief Tamanend

EDITOR'S NOTE: To read a full feature about 44 Union Square/Tammany Hall, see the January-February 2021 issue, page 64, or visit bit.ly/3njhCpj.

44 Union Square sits prominently at the northeast corner of Manhattan's Union Square Park. Repurposed as a 70,200-square-foot Class A commercial building, with dramatic changes unanimously approved by the Landmarks Preservation Commission, the reinvented building commands attention.

Its former life as the final headquarters for the powerful Tammany Hall political organization is apparent in its preserved façades—from the original modest neo-Georgian brick, limestone and terra cotta. However, the captivating rooftop expansion evokes a deeper history, serving as a living monument to the indigenous Lenape people. By expanding vertically with a glass and steel parametric dome bearing the likeness of a turtle shell, the building acquired 30,000 square feet of usable space and has become a beacon in Union Square.

The origins of Tammany Hall as a populist organization include its namesake, the legendary Lenape Chief Tamanend. Early in the design stage, BSK Architects LLP initiated an ongoing consultation with founding members of the Lenape Center to bring an authentic, legitimate voice and representation to the concept of a dome addition inspired by the Lenape creation story of a great turtle rising from the sea. While respectful of the building's historic character, the organic domed intervention provocatively yields

insight into the underlying social history of the building.

The building was designated as a New York City Landmark in 2013 for possessing “a special character, special historical and aesthetic interest, and value as part of the development, heritage, and cultural characteristics” of the city. The restoration/expansion includes a sensitive 3-story façade restoration; the addition of historically accurate bronze and limestone storefronts in the likeness of the original 1928 design; and a 3-story rooftop addition, composed of a self-supporting free-form grid dome atop a hipped roof of steel, glass and terra-cotta sunshades.

Rigorous research was conducted to select the glass for the dome, which provides climate and light control while offering clear views from inside to the park and beyond. Solar insolation, light infiltration, glare probability studies, as well as investigation of glass dome precedents informed the glass mapping over the dome structure and the development of sunshades and other glass shading solutions. Its assembly required a 14-step process to manage the crane-set installation of each of the 54 uniquely designed and sized primary steel members and more than 750 unique glass pieces. The resulting tribute to the Lenape community cloaks a space that is both dramatic and inspiring for all who enter.

Judge's Comment

“ Beautiful restoration and interesting rooftop addition. [The story and space created are compelling. I can see this being a local landmark for the community.

—Howard Hirsch, AIA, LEED AP, founder and president, Hirsch MPG LLC

”

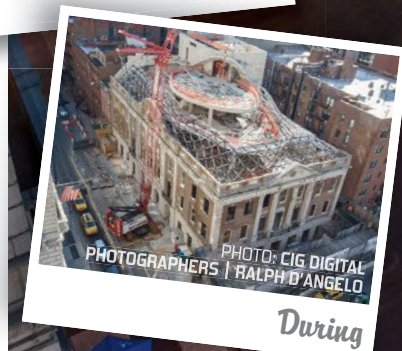
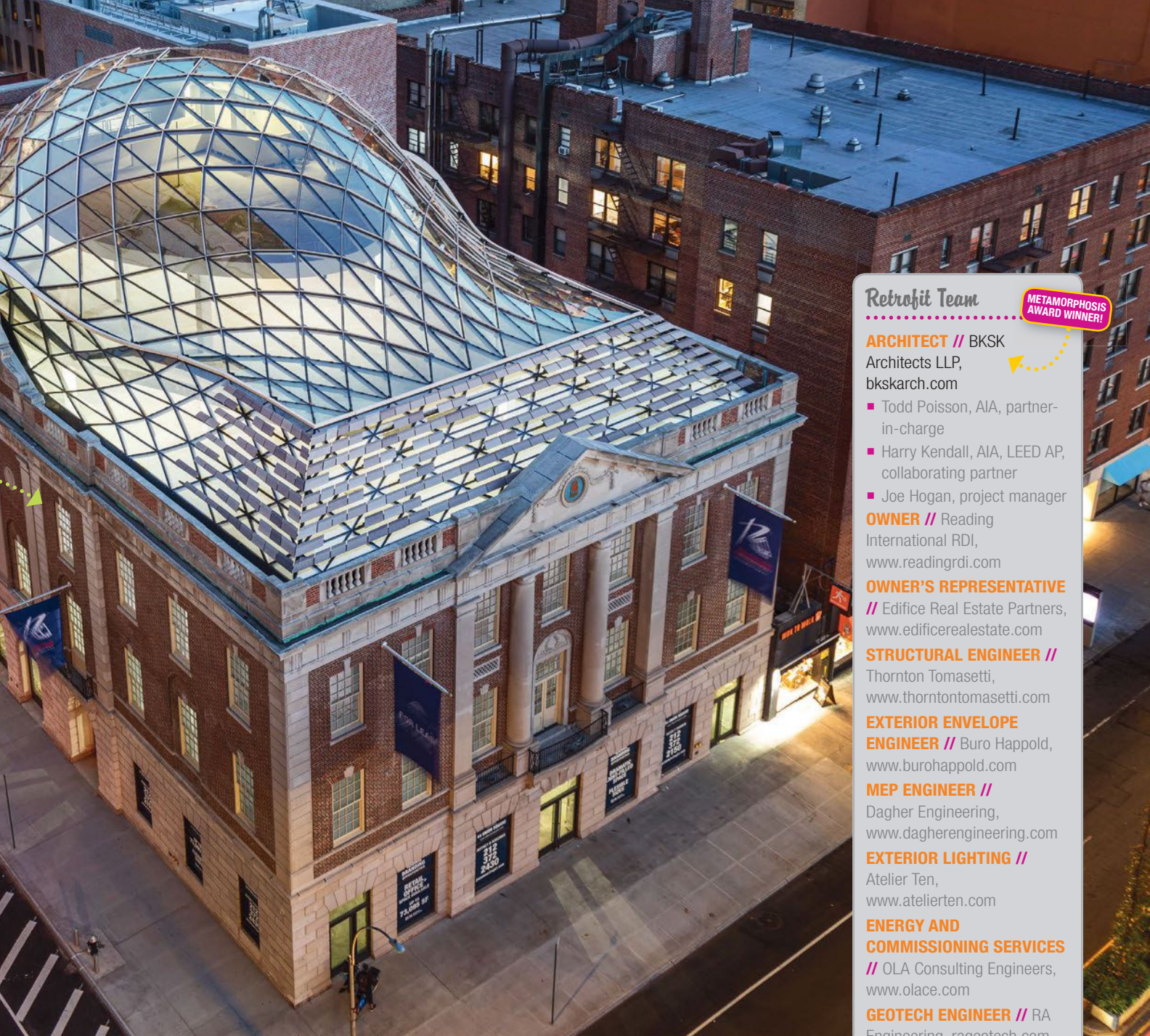


PHOTO: FRANCIS DZIKOWSKI





Retrofit Team

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ARCHITECT // BSK
Architects LLP,
bkskarch.com

- Todd Poisson, AIA, partner-in-charge
- Harry Kendall, AIA, LEED AP, collaborating partner
- Joe Hogan, project manager

OWNER // Reading
International RDI,
www.readingrdi.com

OWNER'S REPRESENTATIVE // Edifice Real Estate Partners,
www.edificerealestate.com

STRUCTURAL ENGINEER // Thornton Tomasetti,
www.thorntontomasetti.com

**EXTERIOR ENVELOPE
ENGINEER //** Buro Happold,
www.burohappold.com

MEP ENGINEER // Dagher Engineering,
www.dagherengineering.com

EXTERIOR LIGHTING // Atelier Ten,
www.atelierten.com

**ENERGY AND
COMMISSIONING SERVICES //** OLA Consulting Engineers,
www.olace.com

GEOTECH ENGINEER // RA
Engineering, rageotech.com

CONSTRUCTION MANAGER // CNY, www.cnygroup.com

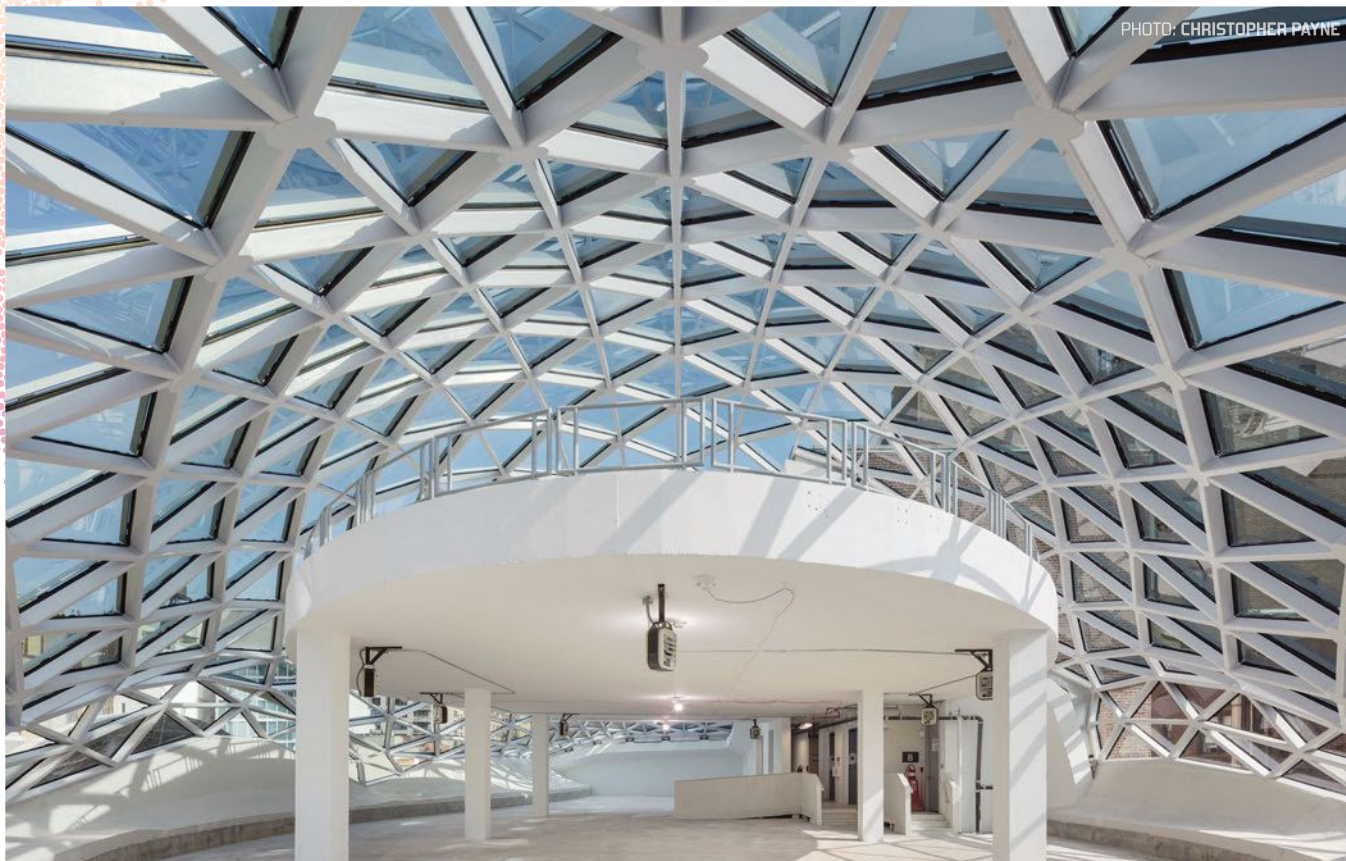
**DOMESTIC STEEL AND GLASS
FABRICATOR/INSTALLER //** Josef Gartner, a division of
Permasteelisa, josef-gartner.
permasteelisagroup.com

**HISTORIC PRESERVATION
CONSULTANT //** Higgins
Quasebarth & Partners LLC,
www.hqpreservation.com

**CLIENT COMMUNITY
RELATIONS CONSULTANT //** Capalino, www.capalino.com

PHOTO: CHRISTOPHER PAYNE





The iconic new addition to Tammany Hall's historic building has created an amazing interior space that offers sweeping views of the city.

Materials

DESIGN SOFTWARE // Rhino 3D, www.rhino3d.com; V-Ray by Chaos Group, www.chaosgroup.com; Autodesk Maya, www.autodesk.com/products/maya/overview; Autodesk 3ds Max, www.autodesk.com/products/3ds-max/overview; and Autodesk Revit, www.autodesk.com/products/revit/overview

CLEAR AND TINTED GLASS // Eckelt, a member of Saint-Gobain, www.saint-gobain-facade-glass.com

- Clear Float Glass Panel: PLANICLEAR
- Tinted Gray Panel: Parsol Grey
- Solar Coating: COOL-LITE XTREME

CAMBRIDGE AND GEORGIAN CUSTOM BRICKS // Glen-Gery, www.glengery.com/products/brick/cushwa-collection

BALMORAL STANDARD FULL-BED BRICKS // Consolidated Brick, consolidatedbrick.com

GLASS SAMPLING VIEWING // Cherry Hill Glass Co. Inc., www.cherryhillglass.com

IRON // Papp Iron Works Inc., www.pappironworks.com

The preservation project was a challenging undertaking, requiring the decoupling of the north and west façades with their antique foundations from the building structure, isolating these exteriors and reinforcing them in place with a concrete flat-plate floor system before demolishing the remaining building from the top down. The expertly managed restoration work on the landmark façades included complete brick repointing and select replacement; terra-cotta rehabilitation; and repairs to the original building's roofline, including brick parapets and limestone balustrades, balusters and rails. A new building core structure was constructed, which doubled the building's height to 6 stories and expanded tenant space by 30,000 square feet. This core was reattached to the landmark façade floor-by-floor. After the reattachment, the building was then capped with the remarkable turtle-shaped parametric dome, which required reinforced concrete shear walls and a fourth-floor concrete corbel to support the new loads.

The redevelopment of Tammany Hall creates a meaningful visual dialogue between contemporary and historic architecture and accommodates change, as well as vertical expansion with historic integrity and a fresh narrative. Capping off the collaboration, the finished project was blessed in a traditional Lenape ceremony acknowledging and honoring past and future occupants of the site.

The unexpected juxtaposition heightens the perception of the building's significance, animates the corner of Union Square in a way it never was, and evokes connections to history that are important to both understand and acknowledge. 


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ADDITION 1st Place Winner

EYE ON THE FUTURE

An Existing Building on the Dartmouth College Campus Now Meets the Needs of Today's Students while Being Prepared for Tomorrow

WRITTEN BY | JOSIAH STEVENSON, FAIA, LEED AP, AND KEVIN BELL, AIA

DURING PHOTO: LEERS
WEINZAPFEL ASSOCIATES

During

PHOTOS: ALBERT VECERKA

Anonymous Hall transforms a vacant 1960s medical library building into a vibrant center for the Graduate School of Arts and Sciences and a social hub for Dartmouth College's north campus. The 33,000-square-foot renovation and addition remakes an extant building and reshapes its surrounding open space into a well-scaled and inviting extension of this historic Ivy League campus in Hanover, N.H.

CONNECTIONS

The renovated building has places for focus, collaboration, social interaction and informal

gathering. A series of light-filled meeting spaces, lounges and niches are coupled with offices and teaching space at each level to accommodate diverse use. The main entry terrace under the addition connects the building's lobby and new café with a newly created lawn. The graduate student lounge on the lowest level opens out to a lowered and protected courtyard below a pedestrian bridge that connects to campus. Joined by a spiral stair overlooking the lawn, the building's upper floors contain faculty offices, classrooms and places for student gathering. The uppermost level features a south-facing, planted rooftop

terrace shaded by a photovoltaic canopy that looks south to Baker Tower and the college's iconic campus.

Reorientation of the building and its dynamic façade to the south, as well as a series of new and redefined open green spaces finally connect Anonymous Hall and its north campus neighbors through the campus to the Dartmouth Green. A sweeping campus walk traffics those coming from the south and brings them past the new south lawn. A new entry axis connects the walk to the Anonymous Hall entry terrace and a new medical school entry. The 800-foot arcing walk then bridges the





building's lower terrace to land at the corner of the north quad, bounded by the building at its south edge.

SMART REUSE

Effective and economical reuse of existing buildings relies on maximizing what remains, successfully repurposing space for new and flexible use, and upfitting building and systems to reduce energy consumption. The renovation of Anonymous Hall tackles the challenge of reuse head-on and outperforms new construction.

Completely abated of hazardous materials and reclad with a high-performance enclosure, the existing building structure was retained and enhanced to meet modern codes. The reuse of its concrete foundations, three floors of cast-in-place concrete, and two floors of steel-framed structure significantly reduces demolition waste and eliminates the carbon-intensive new structure that would otherwise be required to be built in its place.

The story of reuse isn't simply about carbon reduction. Retaining the structure is an important part of the building's economic viability. The cost of demolishing and removing the existing building only to construct a replacement would be substantial. Through careful study, the program optimizes use within the existing structure, makes space to insert a new lateral system, and allows for the attachment of a lightweight and economical addition. Much of the building houses faculty and administrative offices mixed with analytical laboratory and seminar space. The efficient layout fits within the existing grid of columns, ringing shear cores of vertical circulation and building support. The result is a compact, efficient building with a reused structure that is economical without programmatic compromise.

Anonymous Hall's upper floors are designed to be flexible, accommodating easy conversion of its offices and labs to other uses as needs change. The standardized radiant ceiling panels are readily reconfigurable to eliminate the need for replacement during reconfiguration, and the mechanical system has been designed to balance the system as occupancy changes. Daylight and occupancy sensors are wireless to further reduce rework. A perimeter hall and central connector further simplify changes while maintaining safe egress. Meeting and seminar spaces are designed to accommodate today's use with pathways to permit changes in the future.

A backup generator provides emergency and standby power for critical building functions. Although not intended for extended occupation during a full and prolonged power outage, the inclusion of natural daylight and operable windows in all occupied spaces



Anonymous Hall's upper floors, which are accessed by an artistic spiral stair, are designed to be flexible, accommodating easy conversion of its offices and labs to other uses as needs change.

Retrofit Team

ARCHITECT // Leers Weinzapfel Associates, www.lwa-architects.com

- Josiah Stevenson, FAIA, LEED AP, principal
- Kevin Bell, AIA, project manager/project architect
- Juliet Chun
- Jennifer Hardy
- Langer Hsu
- Taehoon Lee
- Zoyi Lin
- Ashley Rao
- Bobby Main

MEP-FP AND LIGHTING ENGINEER //

van Zelm Heywood & Shadford Inc., www.vanzelm.com/vZEngineers

STRUCTURAL ENGINEER //

LeMessurier, www.lemessurier.com

HARDWARE // Robbie McCabe

Consulting, www.mccabe-consulting.com

COST ESTIMATING // Faithful+Gould

Inc., www.fgould.com

CODE // Howe Engineers Inc.,

www.howeengineers.com

SUSTAINABLE DESIGN // Atelier Ten,

www.atelierten.com

Materials

FAÇADE GLASS // Okalux North America, www.okaluxna.com

WINDOW GLASS // Vitro Architectural Glass, www.vitroglazings.com

CURTAINWALL // Wausau Window and Wall Systems, www.wausauwindow.com

WINDOW AUTOMATION //

WindowMaster, www.windowmaster.com

INTERIOR SHADES // Mecho,

www.mechoshade.com

TERRA-COTTA FAÇADE // Terra5 from Cladding Corp., www.claddingcorp.com

FAÇADE ATTACHMENT SYSTEM //

Alpha Vci from Eco Cladding, www.ecocladding.com/system/alpha-vci-system

BUILDING CONTROLS // Johnson Controls, www.johnsoncontrols.com

RADIANT CEILING PANELS //

Steel Ceilings from Armstrong Ceiling & Wall Solutions, www.steelceilings.com

LIGHTING CONTROLS // Lutron, www.lutron.com

Judge's Comment

“ I like how this building resolves that end of the campus, really creating a welcoming design. The addition has nice detailing, and I like the sustainability of the design. —Howard Hirsch, AIA, LEED AP, founder and president, Hirsch MPG LLC ”

means the building and occupants can continue to use the building to bridge partial energy outages like brownouts or disruptions in campus energy.

The building's economical design uses lightweight materials to further reduce the required investment for reuse. The new terra-cotta façade is thinner and lighter than traditional systems, reducing cost and materials within it and structure to support it. The south façade's use of innovative vacuum insulated panels eliminates the need to build redundant structure behind the glass or to detail connections back to a traditional framing system. The radiant ceiling panels serve as the mechanism for heating and cooling, as well as the finished ceiling surface. Existing and new concrete are exposed to relay the life and reuse of the building rather than concealed with additional finishes. The floors and walls are clad in durable and maintainable resilient materials, and the exposed columns at the addition are integrally fireproofed to eliminate the need for additional column cladding.

The building focuses energy-efficiency improvements around several effective strategies, matching envelope and systems to the building and place. These consist of:

1. A highly insulated terra-cotta façade with optimally proportioned triple-glazed windows and overshadowing at three sides.
2. An innovative integrally shaded insulated glass façade system facing south to form an efficient envelope.
3. Hydronic heating and cooling using responsive radiant ceiling panels with dedicated outside air and natural ventilation that are a match to the constraints of the existing building and the efficient façade.
4. Reducing embodied carbon compared to typical new construction by:
 - a. Reusing the concrete and steel structure. The result is a reduction of 1,237 metric tons of CO₂ with the reuse of 20,000 cubic feet of concrete alone.
 - b. Including onsite energy generation with a 67-kilowatt photovoltaic canopy

that reduces net energy use and operational carbon.

Situated in a cold New Hampshire climate, the choice of high R-value terra-cotta-clad walls, triple-glazed windows, south-facing glass with an expanded metal interlayer to limit summer sun and onsite electrical generation create a building with low embodied energy that approaches net zero energy use. This low operational carbon building is further enhanced by reusing the existing 1960s concrete and steel structure, thereby reducing embodied carbon.

JUST RIGHT

Complementing its energy efficiency, the building's transformation is made apparent to users and visitors alike through difference and absence. The extraordinary quiet in the interior spaces alludes to its highly insulated, triple-glazed skin and radiant heating and cooling. The light quality and comfort in spaces at the south façade defy the intense sun incident on the glass. The “just right” light levels in the offices and classrooms indicate the sensors and controls are optimized. A sophisticated set of sensors and controls combined with dedicated outside air and natural ventilation in each space also improve indoor air quality, occupant comfort and connect to nature. From the outside, the ever-changing disposition of the south-facing glass reveals its purpose. It reflects at times, diffuses at times and transitions from translucent to transparent as daylight fades.

The COVID-19 pandemic forced the college to close for residential learning soon into the building's first months of operation. Anonymous Hall operated with limited café hours, no in-person classes and only a few users. Many of its exterior and interior public spaces, meant to enliven the north campus, now welcome the return of student activity. 



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Solve Reroofing Problems Caused By Bulky Low-R Insulation

Bulky insulation can lead to issues with existing parapet or railing

Retrofitting insulation could require raising all of the door thresholds and flashing on the roof.

In order to meet code, conventional insulations often require too much thickness for the roof application

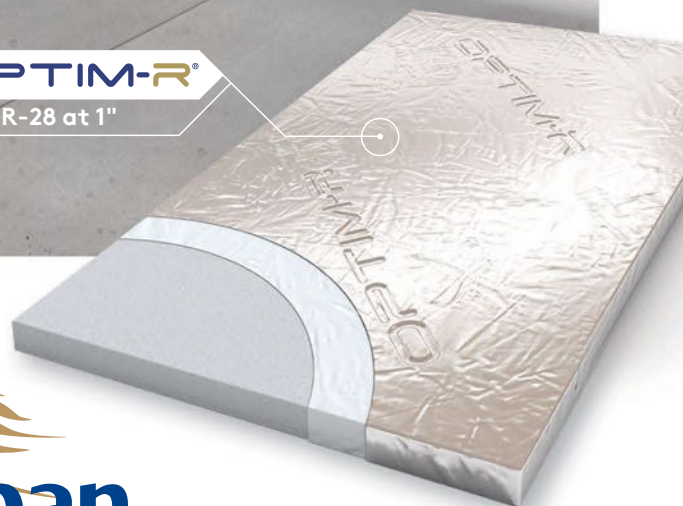
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THE TOAST OF TEXAS

Dallas' Hall of State at Fair Park Is Restored to Its Historic Glory

WRITTEN BY | **ALLAN BARRY**



Before



PHOTOS: ALICIA SPAETE

“ [The designers rejuvenated the building with sensitivity and expertise, repairing damage from the elements over time, providing ADA accessibility, and designing lighting that enhanced but didn't overwhelm this elegant historic edifice. —

Marcy Wong, partner, Marcy Wong Donn Logan Architects

The old saying goes, “everything is bigger in Texas.” As residents of the largest of the contiguous 48 states, Texans have long taken pride in that idea and have a history of striving to do things bigger and better.

This spirit was inherent in 1936 during the construction of the striking Hall of State at Fair Park in Dallas. The 49,600-square-foot structure was built to celebrate the centennial anniversary of the Republic of Texas. Designed by architect Donald Barthelme, the project carried what felt then like an astronomical price tag of \$1.2 million.

What resulted was a beautiful Art Deco building that remains one of the most recognized buildings in the state. It is listed on the National Register of Historic Places and designated a State Antiquities Landmark by the Texas Historical Commission. It joins the Alamo and the State Capitol as one of the three defining icons of Texas architecture.

The city of Dallas understood that the building needed some attention to keep it shining bright for the state's residents. Its restoration was considered one of the most important projects in Texas, second only to the Alamo. To tackle this challenge, the city looked to Gensler.

“As the centerpiece of the 1936 Texas Centennial Exposition, Hall of State is a beloved symbol for the entire state,” says Brian Nicodemus, south central regional practice area leader, Culture + Museum + Civic, with Gensler in Dallas. “Despite its importance, it faded into the landscape of Fair

Park. The building had fallen into a state of disrepair.”

The effort to restore the building to its past glory earned the project 1st Place in the 2021 Metamorphosis Awards, Historic category.

TRANSFORMATION ON A BUDGET

Any historic renovation is challenging, but one of this scale and notoriety could be particularly daunting. The exterior restoration was the primary emphasis for the voter-approved bond funding. Field investigation and detailed testing and examination of existing documents produced a framework of the original exterior finishes and systems.

“Working with a cost estimator to add value on a tight budget, the team focused on beautifying and restoring Hall of State to put it back in the spotlight,” Nicodemus says. “The transformation showcases brightened façades; includes new lighting; preserves historical materials; improves waterproofing, efficiency and maintenance procedures; and upgrades accessibility to ADA code requirements.”

While much of the attention of the project was to the outward appearance of the building, updates and upgrades were made to the function of the building, as well.

“The restoration focused on bringing the exterior back to the 1936 period, but during







The most prominent part of the restoration was the grand bronze doors leading into the building. Local artisans and a glass specialist collaborated to be able to slump the glass perfectly within place.

construction Gensler was able to add scope to include many interior elements, as well as a chiller and HVAC system,” Nicodemus recalls. “These additions were funded with savings found due to aggressive bidding with contractors. Additionally, Gensler designed and added accessibility to allow all guests to experience the building with equal facilitation. This entailed adding a new series of ramps and paths to the site of the building.”

DEHUMIDIFICATION

A decade before the current retrofit, Dallas explored a restoration on an even tighter budget, and that initiative resulted in a new HVAC system and central plant for heating and air conditioning. That system had failed in the 10 years and had to be addressed in the new restoration project. To make it as effective as possible, Gensler took a whole design approach that included dehumidification of the building.

“A priority matrix was developed and scrutinized regularly during the assessment and design phases,” Nicodemus says. “It was hypothesized that humidification was not caused

by a single issue, but most likely a combination.”

That approach led to the restoration of the entire building envelope. It meant repairs to existing below-grade waterproofing membranes, addition of new below-grade waterproofing membranes, and removal of asbestos and mold throughout the building. Windows and doors were removed, repaired and resealed. Interior conditions were dewatered, removing air-conditioning pipe condensation, for example. A mechanical engineer recommended a new internal gutter to help eliminate potential drip-page in pipes and better regulate the internal environment.

Improvements also were made to the courtyard to help control water on the site. The drainage on the northeast part of the site was improved so the building’s lower level wouldn’t flood after it rains. The building was further protected from flooding through the addition of landscaping and a change of grading to ensure positive drainage from the building.

MATERIAL MATCH

“Materials on historic structures are only original

Retrofit Team

OWNER/DEVELOPER // City of Dallas, dallascityhall.com

LEAD DESIGN FIRM // Gensler, www.gensler.com/offices/dallas

GENERAL CONTRACTOR/ CONSTRUCTION MANAGER // Phoenix I Restoration and Construction Ltd., phoenix1.org

MASON // Brazos Masonry Inc., www.brazosmasonry.com

STRUCTURAL ENGINEER // Walter P. Moore, www.walterpmoore.com

CIVIL ENGINEER // Pacheco Koch, www.pkce.com

MEP ENGINEER // MEPCE, mepce.com

ARCHITECTURAL CONSERVATOR // van Enter Studio Ltd., www.vanenterstudio.com

BRONZE RAILINGS // Weimann Metalcraft, wmcraft.com

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once,” Nicodemus says. “Therefore, great care was taken to source limestone and review many mockups and samples to match the existing stone with the new construction and repairs.”

Material considerations can become touchy when trying to do as much as possible to replicate the look and feel of the original structure and still create an upgrade with the best possible components available today.

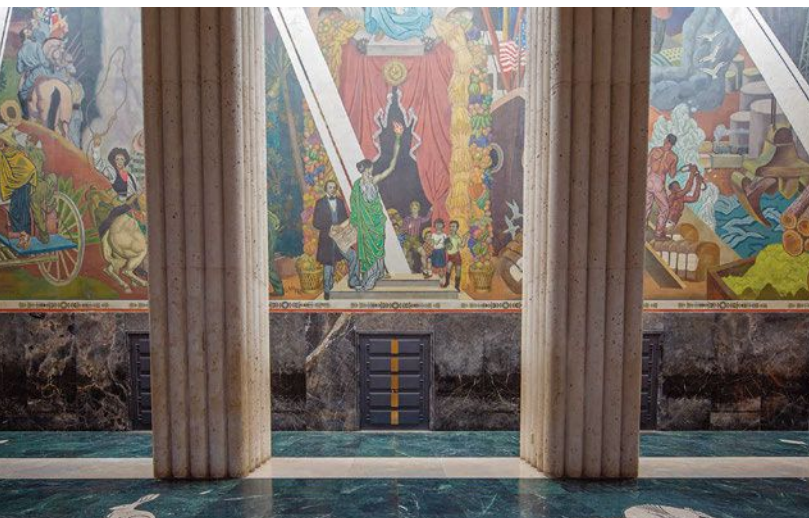
Although steel is the traditional go-to reinforcement option, its material properties are drastically different than the cordova cream limestone that clads Hall of State. The project team repaired flexure cracks in the solid masonry lintels of the basement windows using glass fiber reinforced polymer (GFRP) bars bonded in notches cut into the soffit of the lintel and patched over with a custom-colored material. Embedding the bars in the soffit

minimized the aesthetic impact while providing the necessary tensile reinforcement.

Gensler partnered with Phoenix I Restoration and Construction Ltd., the general contractor, and Brazos Masonry Inc. to make sure that everything the team did stayed true to the original expression of the building.

“Working collaboratively, we established review criteria that was repeatable to enable

(continued on page 80)



Enhancing the existing murals, artifacts, state and national treasures became an integral part of the renovation with hopes they would engage the public once again.

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our team to assess stone from multiple sources with the same conditions," Nicodemus says. "We looked at the stone in dry, wet, sunny and shaded conditions. During design, Gensler's historic preservation approach to the project included an important discovery and assessment phase, during which we analyzed paint and other finishes, waterproofing membranes and wall assemblies. During this process, we discovered the original paint colors for the windows and doors."

TEAM EFFORT

Everyone involved in the Hall of State at Fair Park restoration worked with a passion for this classic building and built a true spirit of collaboration to ensure the job was done well.

"During this project, the lead role changed by team member. Initially, the lead was the city of Dallas, the Dallas Parks and Recreation Department, and Dallas Historic Society," Nicodemus recalls. "During design, Gensler was the lead. During construction, Phoenix I was the lead. It was a wonderful relationship between team members that truly cared about this building."

The project was submitted for approval by the Dallas Landmark Commission, Texas Historic Commission and the Secretary of the Interior's Standards for Rehabilitation. Today, the building stands just as proud and bright as it did in 1936.

"The response to the completed project has been overwhelmingly positive, winning numerous design and restoration awards and honors," Nicodemus says. "The building beams in the sunlight at dusk. It is a treasure to the city of Dallas and all who visit it."

Materials

MASONRY CLEANING // 766 Limestone & Masonry Prewash, prosoco.com, and D/2 Biological Solution from D/2 Biological Solutions Inc., d2bio.com

MASONRY RESTORATION // Tuckpoint Mortar from Spec Mix, www.specmix.com; Jahn M70 Restoration Mortar from Cathedral Stone Products, www.cathedralstone.com; and Historic Restoration Mortar, Last Patch Limestone and Ultimate Epoxy from Bonstone, www.bonstone.com

STONE // Tennessee Crab Orchard from Cumberland Mountain Stone, www.cumberlandmountainstone.com; Shell Stone and Cordova Cream Limestone from Continental Cut Stone, www.continentalcutstone.com; and Indiana Limestone from 3D Stone, www.3dstoneinc.com

TILE // Kerapoxy from Mapei, www.mapei.com, and TileLab Matte Sealer & Finish from Custom Building Products, www.custombuildingproducts.com

BACKER ROD // Armacell FillPro from Armacell, www.armacell.us

WATERPROOFING // TREMproof 250GC from Tremco, www.tremcosealants.com, and Bentonite Composite Sheet from AVM Industries, www.avmindustries.com

SEALANTS // Emseal, www.emseal.com, and DOWSIL 795, www.dow.com

GLAZING // Starphire Glass from Vitro Architectural Glass, www.vitroglazings.com, Fabricated by Oldcastle BuildingEnvelope, obe.com

OPENINGS RESTORATION // Krud Kutter from Rust-Oleum, www.rustoleum.com; OSHPO Rust Treatment from The Skybryte Co., skybryte.com; POR-ROK Anchoring Cement from CGM Inc., cgmbuildingproducts.com; and Model 27 Door Closer from Rixson, www.rixson.com



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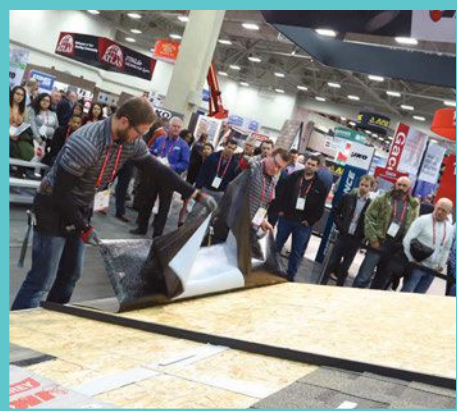


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